Clinical Lectures
ON
DISEASES OF THE EYE.

By CHARLES BELL TAYLOR, M.D., F.R.C.S. EDIN.,
HON. SURGEON TO THE NOTTINGHAM AND MIDLAND EYE INFIRMARY.

LECTURE XI.[1]

THE ACCIDENTS OF EXTRACTION.

MR. PRESIDENT AND GENTLEMEN,—When Von Moltke was asked by what criterion he would judge of the capacity of a general in warfare he said, "He must be tried by the touchstone of disaster"; and I think you will agree with me that it is so in surgery—that it is the accidents, the unforeseen casualties, the sinister contingencies, which tax our resources, which test our skill, which tend to perfect our manipulations, and which enable us at last to triumph over difficulties and dangers which, but for such special practice, must have proved insuperable. Let us see now what are the accidents, the difficulties, and the dangers most likely to beset us during and after the process of cataract extraction; what may be done towards their prevention; and how best to deal with them when, in spite of our care, they threaten destruction to our patients. It is now upwards of two centuries since Wenzel endeavoured to improve upon the ancient method of reclination and depression by opening the cornea with scissors and actually removing the lens from the eye; and it is nearly 150 years since Daviel presented his celebrated memoir on "Extraction à lambeau" to the French Academy of Medicine. Daviel was followed by Beer, who invented the knife (Fig. 1)

FIG. 1.

which is known by his name, and both these eminent surgeons made a flap of one-half or more of the cornea, delivering the lens through the natural pupil—an operation which, when successful, certainly left nothing to be desired; but the drawbacks, the accidents, the difficulties and dangers were so numerous, so ever-present, and so frequently fatal, that Beer is reported to have said that he "spoilt a hatfull of eyes before he could save one."[2] In fact, it was exceedingly difficult to make the incision when seated on a chair, facing a sensitive patient who was also seated—the position assumed by Daviel and his successors—or in any way to keep the flap in position; it was constantly falling into folds and frequently became retracted or even reflected upon itself. The vitreous, too, was prone to protrude or to escape in quantity sometimes, followed by hæmorrhage, so that I have more than once heard in the midst of an operation Dupuytren's historic exclamation, "L'œil est perdu." Moreover, even when the extraction was satisfactorily accomplished accidents were frequent. The iris was very apt to prolapse, the flap to become infiltrated in whole or in part, or the eyeball to suppurate; even when matters were not so bad as this there was, in a large proportion of cases, much pain, constitutional irritation, and protracted recovery, so that many blind persons refused operation altogether, and operators were very chary of interfering with patients who had the least sight remaining in either eye, so that if the worst should come to the worst they were in a position to exclaim, with the Thane of Cawdor, "Thou canst not say I did it." All these accidents of extraction were only to be successfully counteracted or avoided by great skill, practice, and foresight on the part of the surgeon, and even the best operators, as the late Mr. Critchett has remarked, "if they would only deal quite honestly with themselves, would have to record cases that, in spite of all their care and all their skill, had given them such an amount of anxiety as to neutralise, and more than neutralise, the satisfaction they derived from their successful cases." Such was the *status quo* with regard to the capital operation of ophthalmic surgery when Waldau, the late Von Graefe's assistant, having noticed that iridectomies were hardly ever followed by any ill consequences, suddenly proposed to excise a portion of iris through a small incision, and to scoop out cataracts with a spoon. Here was a glimpse of heaven! "*Hic est quem quæris.*" No flap to turn down; no iris to prolapse; no wound that could be forced open by post-chloroform sickness, or likely to be damaged by the indocility or stupidity of the patient. But, alas, "Man never is, but always to be, blessed." It was soon discovered that Waldau's procedure was no more free from distressing flaws than any other cataract operation; it was found, for instance, that it was quite inapplicable in certain forms of hard senile cataract; that it was often impossible to insinuate Waldau's scoop between the cataractous lens and the hyaloid fossa without rupturing the hyaloid membrane and setting the vitreous free; that the lens was apt to be dislocated by the spoon, and pushed down into the vitreous chamber, where it had in whole or in part (when possible) to be fished out, to the manifest damage of the eye; that a certain amount of bruising and stretching was inevitable; and that persistent iritis, with the formation of dense secondary cataract, were among the consequences of the traumatism caused by the introduction of such a formidable weapon as Waldau's spoon, with its steep edges, into the interior of the eye. Hence, although the operation survived for a time in this country, specially (with modifications) in the practice of Messrs. Bowman and Critchett, it speedily fell into disuse on the Continent, and ultimately

FIG. 2.

FIG. 3.

only bore fruit in the hands of Von Graefe, who, having visited this country in order to see Mr. Critchett's modification of Waldau's traction instrument, returned to Berlin and forthwith devised his celebrated method of linear extraction. Von Graefe's aim was to dispense with the spoon by enlarging Waldau's incision, and to extract the lens without making a flap, and in order to attain this end he invented a knife (Fig. 2); placed his incision much further back than Waldau's (Fig. 3); excised the iris and delivered the lens behind the artificial pupil. The advantages claimed for this operation were: (1) that the sclerotic, which was

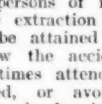
[1] Delivered before the Nottingham Medico-Chirurgical Society on Jan. 2nd, 1895. Lectures I. to X. were published in THE LANCET of Sept. 5th, 1885; May 8th, June 26th, and Sept. 4th, 1886; April 16th and 23rd, 1887; Sept. 10th and Dec. 24th, 1887; Dec. 15th and 22nd, 1888; Nov. 8th, 1890; July 1st, 1893; and Aug. 18th, 1894, respectively.

[2] "If we take into consideration the great and internal difficulties of the operation itself as he (Beer) performed it, we shall come to the conclusion that the statement is not very far from the truth."—"Practical Remarks on the Treatment of Cataract," by the late George Critchett.

alone incised, was much less likely to suppurate than the cornea; (2) that the elasticity of the tissues in this situation, and the linear character of the wound, rendered separation of its edges almost impossible; and (3) it was contended that the conjunctival flap or overlay would prove a potent safeguard against microbial infection. But the very large iridectomy necessary with this form of incision was a palpable objection. The close approximation of the edges of the wound impeded the exit of the lens, hæmorrhage often complicated the extraction, the vitreous often escaped, and iritis, iridocyclitis, and sympathetic ophthalmia were more frequent with this than with almost any other cataract operation; hence it was speedily evident that Graefe's operation pure and simple could never be anything but a *pis aller* in certain exceptional cases.[3] Nevertheless, it survived in name, but in name only, and in the hands of various operators speedily resolved itself into a mere enlargement of Waldau's incision at each extremity of the wound, just sufficient to enable the surgeon, while retaining the iridectomy, to dispense with the spoon; and this operation, which I adopted before Von Graefe's suggestion was heard of, is the operation *par excellence* with most ophthalmic surgeons to-day. The advantages claimed for it are—that it obviates bruising of the iris, prevents prolapse of the iris, facilitates the exit of the lens, forms a means of escape for the aqueous humour, which in gushing out might otherwise force the iris between the lips of the wound, and reduces the necessity for secondary operations to a minimum. But this operation also has its special accidents, its difficulties, its drawbacks, and its dangers. For instance, the extent of the wounded surface is doubled by the excision of the iris; the pain of the iridectomy is apt to provoke spasm and dangerous resistance on the part of the patient; the iris is always more or less trapped at the extremities of the wound; the exposure of the uveal track, bleeding and prolapse of the capsule between the lips of the incision—all of which are likely to happen—are to be deprecated; while the excision of the iris is fatal to the perfection of the eye.

How are we to prevent or avoid these accidents, these complications, these drawbacks to a method of extraction which is regarded by so many ophthalmic surgeons as the premier operation for cataract to-day? Well, they are to be avoided, and with the greatest ease, by simply enlarging Waldau's incision a little further, and dispensing, not only with the spoon, *but also with the iridectomy*. Now, Gentlemen, that is the operation which I venture to assure you will take the place of all others as the operation *par excellence* in all ordinary cases of cataract. Its supreme excellence is its simplicity, and in order that you may appreciate that excellence I propose to perform the operation in your presence; to show you in the persons of numerous patients who have undergone *double* extraction by this method what splendid results may be attained by it; and lastly to point out to you how the accidents, the difficulties, and the dangers sometimes attendant upon it may be counteracted, controlled, or avoided. The operation, as you see, is extremely simple: it is merely a short flap upwards (Fig. 4), and the wonder is that our predecessors

FIG. 4.



when making the old flap had not hit upon this modification long before our time. No doubt the introduction of anæsthetics—chloroform, ether, gas, and cocaine—has had much to do with this, as with other great advances in surgery. You must be sure, when about it, to make the incision large enough, and to locate it in the corneo-sclerotic junction; any invasion of the fibrous tissue of the sclerotic entails the disadvantages of Graefe's operation, and encroachment upon the cornea is to be deprecated, as wounds in this situation are apt to spoil the normal curve, do not heal so readily, and are frequently the cause of annoying anterior synechiæ.[4] When the wound is made with precision in the position I have indicated, the flap fits like a watch glass, does not override the stump, as is otherwise so frequently the case,[5] and normal conditions are so completely restored, even immediately on the completion of the operation, that fluids when dropped into the conjunctival sac do not penetrate into the anterior chamber except by the usual process of endosmosis. My knife will be found the best for making the incision, and the facility with which the right hand may be used for the left eye, with this modification of Graefe's or Linhart's pattern, is undoubtedly a great advantage (Fig. 5).

FIG. 5.

I always use a lamp for the purpose of illumination, and the facility with which instruments and other appliances may be in a moment sterilised by the hot air flowing from the chimney is not its least advantage (Fig. 6). Unlike many operators, I prefer to incise the capsule with the flame-shaped cystotome rather than with the knife, as it passes across the anterior chamber, and, as a rule, to confine the incision to the periphery of the capsule, on a level with the equator of the lens. When the capsule is incised slight pressure will cause the lens to revolve upon its axis and to present at the pupil, which it slowly dilates, prior to emerging, followed by a mass of cortex. The iris may then be replaced by gentle massage through the

FIG. 6.

closed lids, and the *status quo* maintained by the imposition of a borated pad. If the cataract does not stir on pressure after completion of the capsulotomy

[3] For instance, when one eye has been lost after extraction from malnutrition of the cornea in an old, thin subject, with white hair, hard arteries, and wrinkled, silky skin, the other has a better chance of salvation with a linear incision well back and confined to the fibrous tissue of the sclerotic.

[4] "At the time when I operated on all kinds of cataract without iridectomy I believed at first that prolapse of the iris could be prevented by making a corneal incision like Liebreich's. This was an error from which I promptly recovered, thereafter carrying the entire wound to the vicinity of the edge of the cornea. Prolapse and impaction of the iris are less frequent when this is done, without counting other advantages of the peripheral corneal incision."—Landolt: Cataract Operation in Our Day, p. 158.—"The Transactions of the American Medical Association, 1887, furnish an argument in favour of the flap operation, specially against turning the edge of the knife forward in completing the incision."—Ophthalmic Record, July, 1894.

[5] See Becker and Norris's Atlas of the Pathological Anatomy of the Eye.

the opening in the capsule is insufficient, the lens larger than supposed, the iris too rigid or adherent, or the corneal wound too small, or the crystalline itself so shrunken as to be uninfluenced by any pressure which may safely be brought to bear, in which case the capsule must be re-incised, the corneal wound enlarged, iridectomy performed, or the cataract removed with a scoop. The results to be obtained by this operation are simply perfect. I have been in the habit of performing it for years, and as with a large practice one sometimes fails to recognise former patients, I find it now and then exceedingly difficult to say whether any operation has been performed or not. Let me illustrate my meaning. A short time ago a farm labourer, aged, gaunt, and weather-beaten, applied to me for treatment on account of catarrhal conjunctivitis affecting both eyes. He had managed to get wet through on his way to the infirmary, did not seem to mind it, and said he had been much exposed to wind and rain both night and day during the then recent lambing season. I satisfied myself that there was no iritis or other deep-seated mischief; treated him accordingly as an out-patient, and he was speedily discharged cured. Later he reappeared in order to solicit my attention to a friend who, he said, was suffering from short sight. This man I found was the subject of congenital cataract, and suggested that he should submit to operation. "Aye, you do," exclaimed patient No. 1; "I have, and it don't hurt a bit." "No, my friend," I said, "you only had inflammation from cold; that has nothing to do with cataract." "Oh, but I had, though," he replied; "you took cataracts off both my eyes six years ago; don't you remember? I was blind; my daughter used to lead me to your surgery." I said, "Where are your spectacles?" "Oh," he replied, "I never use them now without I want to read a bit at night." And this was true; I had operated on him—both eyes at one sitting—years ago, and although I examined his eyes when prescribing for the catarrhal affection I failed to see anything to remind me of what had been done.

Now, Gentlemen, that is the perfection of art—to conceal art—and I think you will agree with me that while such results are to be attained modern science will never be satisfied with anything less. The instance I have cited is not a peculiar, special, or picked case; I shall show you to-night many cases of double extraction with perfect corneæ and central and movable pupils, and they could be multiplied by the score. Of course, the operation is, as a rule, completed without misadventure, but you must not suppose that this method of extraction, any more than any other surgical procedure, is free from its peculiar accidents, difficulties, and drawbacks. For instance, the lens—as you are doubtless aware—in certain cataractous subjects is apt to become considerably swollen during the process of opacification,[6] and this increase of bulk, as you can readily understand, causes it to encroach upon the anterior chamber, displaces the iris forwards, and renders it exceedingly difficult to incise the cornea in the way I have indicated without wounding that membrane. You may complete the puncture and counter-puncture, but the moment you commence to cut upwards the aqueous escapes, the iris folds over the edge of the blade, and it seems as though you must inevitably either slice off a piece and so spoil the result, or withdraw the knife and postpone the operation. It was this difficulty and danger which led Beer to the adoption of his wedge-shaped keratome, a knife he was enabled to push steadily onwards without any to-and-fro movement, and so retain the aqueous; and it is the same difficulty and danger which is now leading so many ophthalmic surgeons to abandon the last remnant of Graefe's operation—the narrow knife—and resort to Beer's or some imitation of it.[7] I have used Beer's knife and similarly shaped instruments of my own devising, some of which have been adopted by my ophthalmic friends (Fig. 7); but there is one great objection to them all: you are compelled with these wedge-shaped knives to confine the incision to the cornea, and are not able with them to make a wound anywhere with extreme precision. I therefore advise you to adhere to the narrow knife modified according to my pattern, and when the iris folds over the edge of the blade to cut round with the hilt in the corneo-sclerotic junction. In this way any unintentional wounding of that membrane may be avoided, an accident which may be again forestalled by making a shallow incision close to the upper margin of the pupil, and enlarging it after completion of the section at either extremity with scissors; or

FIG. 7.

the operation may be completed with scissors alone, or the section finished with my secondary knife (Fig. 8). The wound with scissors heals readily enough, but you are compelled with them to encroach more upon the cornea than I think either necessary or desirable. Of course, retention of the aqueous is a great safeguard against the folding over of the iris upon the edge of the blade; but, inasmuch as with the narrow knife any evil effects may be readily counteracted, I cannot consider—as some writers do—

FIG. 8.

its premature escape as a formidable accident. It is different, however, when the tissues are so altered that the vitreous in an equally fluid condition drains away, and is followed by complete collapse of the eyeball. When the tissues are in this diseased condition, operative interference, unless conducted with great care, is apt to be followed by disastrous consequences. Here is a case in point. Some time ago I was asked to operate upon a man close on fifty years of age who had been all his life nearly blind from congenital cataract. The right eye had been operated on elsewhere and was, unfortunately, completely lost; nevertheless, as the left seemed favourable for operation I proceeded to extract *secundum artem*. No sooner, however, had I completed the counter puncture than the eyeball visibly shrunk and collapsed, falling into deep wrinkles and receding within the orbit. I immediately withdrew the knife and closed the eye with a borated pad, telling the patient the operation was over. Notwithstanding the slight and incomplete wound inflicted the most intense reaction followed; the eyelid became so swollen that I was obliged to divide the external canthus, to clip away folds of chemosed conjunctiva, to leech, freeze, and paint with nitrate of silver in order to stave off death of tissue from excessive inflammation. The responsibility in such cases is tremendous, and although "de l'audace" is sometimes a good motto, "cavendo tutus" with such patients is far better. I can recall three or four similar cases, and although you may say that I ought to have known that the vitreous was fluid before I commenced the operation I can assure you that it is impossible in many cases to diagnose this condition beforehand. A tremulous iris is, of course, an indication; but one may have a fluid vitreous without a tremulous iris and a tremulous iris without a fluid vitreous. Moreover, a tremulous iris has been observed when only a portion of the vitreous—that within the area of the retina—has been fluid. The collapsed eyeball fallen back in the orbit, shrunk, wrinkled, and not much larger sometimes than the end of the finger, has a ghastly appearance; but I have seen the tissues of both eyes completely collapsed without any displacement of their relative positions, detached retina, or separation of choroid from the sclerotic. I have known the whole contents of the vitreous chamber to escape and twelve hours later the chamber to be refilled with fluid, and ultimately good vision restored. Escape of the vitreous, when it is of normal consistence or firmer than natural, entails separation of the tunics of the eyeball, is a much more serious accident, and is an indication of increased tension, which should have been ascertained beforehand and dealt with by iridectomy some time before extraction, or by myotics, or both. In these cases the moment the incision is completed the iris bulges and the cataract bursts through the suspensory ligament, or when the capsule is opened the vitreous gushes out, the patient

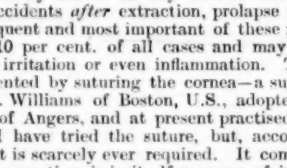
[6] This swollen condition sometimes precedes the formation of cataract, and we find patients greatly advanced in years suddenly, to the astonishment of everybody, regain the power of reading without spectacles, a phenomenon which may be also due to weakening of the suspensory ligament and dislocation of the lens forwards.

[7] Dr. Graddy, for instance, in his address before the Nashville Academy of Medicine, said: "I think it is only a question of a short time whether we shall all return to the broad knife and classic flap operation slightly modified."

groans with pain referred to the head and caused by displacement of the ciliary nerves, the vitreous is followed by blood, attempts to retain the tissues and fluids *in situ* by pressure are frustrated by vomiting, straining, or uncontrollable agitation on the part of the patient, the retina and choroid become detached from the sclerotic, and we are sometimes compelled to perform excision of the eyeball at once.

Vitreous may escape with the cataract, or immediately after its removal, owing to straining of the patient—I have seen the major portion of the contents of the eyeball deliberately squeezed out in this way; nevertheless, considerable escape of vitreous may occur and yet all go well. I have known this accident to happen, much to my chagrin, in one eye when both were operated on at one sitting, and the apparently damaged organ ultimately proved the better of the two. Of course, all pressure must be at once removed if this accident occurs, and the lens, if necessary, dipped out with a spoon. Partial dislocation of the lens, which sometimes occurs from undue pressure with a too small wound, may be righted by slight manipulation upon the closed lids and temporary occlusion of the eye. In this way escape of vitreous with possibly detached retina and formation of opacities may be avoided. The introduction of the knife with the cutting edge wrongly placed has been dwelt upon as one of the accidents incidental to this operation, but with an extremely narrow blade the event is of no importance, as it may be readily turned in any desired direction. With regard to accidents *after* extraction, prolapse of the iris is the most frequent and most important of these; it occurs in from 5 to 10 per cent. of all cases and may give rise to considerable irritation or even inflammation. This accident may be prevented by suturing the cornea—a suggestion first made by Dr. Williams of Boston, U.S., adopted by Suarez de Mendoza of Angers, and at present practised by Dr. Kalt of Paris. I have tried the suture, but, according to my experience, it is scarcely ever required. It complicates and prolongs the operation, is in itself a source of irritation, and is not always quite successful in preventing prolapse. Dr. Kalt passes the thread before making the incision, drawing out a loop so as to avoid its severance during the operation.[8] (Fig. 9.)

FIG. 9.



I think the best method of dealing with prolapse, when it does occur, is to leave it alone; according to my experience it disappears spontaneously and ultimately entails no greater defect than would have been occasioned by an iridectomy in the same situation. If, however, the prolapse should be large, and the pupil consequently drawn inconveniently upwards, an iridectomy downwards will generally suffice to restore useful vision. In ordinary cases, and when the patient appears to be fairly healthy, the exigencies of practice often compel me to operate, *séance tenante*, upon the day I see the patient for the first time, and often at my private surgery, the patient walking afterwards to the Infirmary, a distance of five hundred yards; so that my results have been somewhat severely tested. Any uncomfortable feeling after operation, as a rule, passes away, and the patients return home within a week.

If there should be pain, however, and it should last three or four hours, it is well—"Venienti occurite morbo"—to combat it at once by the injection of one-eighth of a grain of morphia under the skin of the corresponding temple. Dr. Smith of Detroit injects one-quarter of a grain as a routine practice, in order, he says, to prevent prolapse by securing contraction of the pupil. I should, however, be afraid from my experience of morphia injections to use so large a dose without tentative experiments upon the patient beforehand. Any continued pain must be looked upon as a formidable symptom and must be met at once with repeated morphia injections, ice or hot fomentations, leeches, or bleeding from the arm; the latter was Graefe's practice, and it is believed that in this way commencing suppuration may be arrested. When one has the opportunity of observing the patient some time before operating it is a good plan to try the effect of a bandage. If this sets up conjunctivitis—and in old persons it is apt to do so—it is well to treat the eye for a short time before doing anything, and to wait until the conjunctiva presents the white, glistening appearance of health before any operative interference. Obstructions in the lacrymal and nasal ducts should also be dealt with, otherwise the wound may be infected by the discharge. In spite of improved methods of procedure and thorough asepsis, and so far as possible antisepsis, and, indeed, without any special constitutional defect, suppuration now and then occurs.[9] According to Mr. Treacher Collins this is more common in old people than in young; but the tendency is greater, so he says, between the sixtieth and seventieth years than between the seventieth and eightieth years, although it is greater between the eightieth and ninetieth years than between the sixtieth and seventieth years. I have operated upon two patients over ninety years who did well, and upon a great number of patients aged eighty and upwards. Many of these have very white hair, thin skins, and rigid arteries, and one must not be surprised if the cornea collapses the moment the lens escapes without any loss of vitreous, or if it falls inwards and assumes a concave form, exactly like a tiny bird's-nest. If the wound, however, is made in the corneo-sclerotic junction, perpendicular to the antero-posterior axis of the eyeball, the flap is maintained accurately *in situ*, and no ill consequences need be feared.

Many persons suppose that, if aged persons are operated upon, the restored sight is likely to be imperfect or not to last; that, however, is not my experience, as hundreds of patients can testify. Seventeen years ago I operated upon the late *doyen* of the medical profession whose recent death has caused much comment in the medical press. I operated upon him in his eightieth year, and at ninety-seven he could see well enough to read and write as well as anyone, and with his own hand indited an essay on Longevity in the Fens. Sight so perfect at such an advanced age naturally was the subject of remark, though the commentators were evidently not aware of the fact that he had been operated on for cataract seventeen years ago. If conjunctivitis should come on after the operation it should be treated by leeches, astringents, and nitrate of silver. None of these, so far as my experience goes, interferes with the healing of the wound, though I am aware—I had it from his own lips—that Graefe had a great dread of leeches when applied to the temple within three or four days of the operation. Delirium sometimes comes on after extraction; it was not infrequent when atropine was freely used after removal of the lens. I have seen a patient so excited by the misuse of atropine that he removed the pads from his eyes and got under the bed, setting his attendants at defiance and dictating terms of surrender from this coign of vantage. No small proportion of the accidents which occur after extraction are attributable to constitutional dyscrasia on the part of the patient. I have known the healing of the wound delayed for months by an obstinate skin affection, and a similar effect to result from imprudence in an alcoholic; I have known diabetes entail suppuration after an ideally perfect operation accompanied by the most rigid asepsis and antisepsis. Gout, syphilis, and rheumatism may prove disturbing elements and need attention, while the danger of auto-inoculation from intestinal sepsis must be carefully guarded against. Putrefaction may be prevented by antiseptics, just as they will preserve meat; but antiseptics are not omnipotent, and we must never forget that healthy tissue is fatal to the microbes on which infection depends; a high state of health, too, will prevent excessive reaction or uncontrollable inflammation. The authorities of the prize-ring are well aware that by augmenting the general health they reduce the risk of sudden incapacity from injury almost to nothing. "Hit him hard, he won't swell," perhaps expresses in fewest words what I wish to convey. The poet Armstrong tells us to—

> "Couch cataracts on a day so fair
> That not a cloud disturbs the air";

but I may say that it is not wise to select what is termed "bad keeping weather" for operations.

> "When meat won't keep sweet,
> Then don't opereete."

[8] The woodcuts are from his paper on the subject, translated by Knapp and published in his Archives.

[9] Panas says that he has got rid of suppuration by injecting the anterior chamber of the eye with saturated solution of boracic acid. "A partir de cette époque nos opérés ont été à l'abri, non seulement de la panophthalmie, mais la réaction post-opératoire est devenue presque nulle."—Traité des Maladies des Yeux, tome 1, p. 580.

You will perceive that I am no advocate for the indiscriminate adoption of iridectomy in all cases of extraction, but I must again warn you that you will commit a grave error if you neglect this precaution in all cases of glaucomatous tension. Excision of the iris may also be practised some weeks before extraction—as has been recently done by Landolt in the case of Jules Simon—in persons of great age, very feeble health, or when the chances of success are small or the interests at stake very large. In order to secure success in any operation we must foresee what may happen and vary our procedure accordingly. The First Napoleon used to say, "Si je parais prêt à tout, à répondre à tout, à faire face à tout, c'est parce que, avant de rien entreprendre, j'ai longtemps médité, j'ai prévu ce qui pourrait arriver." "He foresaw what might happen." Let us take a leaf out of the book of the greatest military commander and most renowned despot of the century, and if we may not hope for rank and titles such as are freely bestowed upon our friends of the Camp, the Bar, or the Senate, let us console ourselves with the reflection that our lives are spent in endeavouring to do good, in prolonging life, in diminishing suffering, and last, but not least, in restoring sight to our fellows.

Nottingham.

NOTES ON SIX CASES OF CENTRAL RESPIRATORY PARALYSIS.

BY F. J. T. SAWKINS, M.B., CH.M. SYD.,
MEDICAL SUPERINTENDENT OF PRINCE ALFRED HOSPITAL, SYDNEY;
AND
A. S. VALLACK, M.B., CH.M. SYD.,
LATE ASSISTANT MEDICAL SUPERINTENDENT, PRINCE ALFRED HOSPITAL.

IN the following somewhat remarkable series of cases, all of them treated at the Prince Alfred Hospital, Sydney, death was due to a common cause—viz., inability of the respiratory centre to perform its functions, due in all probability to increase of intra-cranial pressure. Besides this common feature several of the cases developed clinical phenomena in themselves of considerable intrinsic interest. We shall give in each case a brief clinical sketch of the symptoms and an epitome of the pathological conditions found after death. These will be followed by brief remarks upon interesting or remarkable symptoms shown by individual cases; and, finally, we shall deal with those features common to them all.

CASE 1. *Interventricular hæmorrhage.*—The patient, a female aged fifty-four years, was admitted in a dazed condition, could answer questions but very slowly, and complained of pain in the occipital region. No paralysis or paresis was present. The temperature was normal. The heart and lungs were clear. Later in the day her condition improved, but about seven hours after admission she was suddenly seized with respiratory embarrassment, followed a few minutes later by total cessation of respiratory effort. At this time the heart was beating strongly and regularly. On practising artificial respiration the air way was found to be quite clear. As no effort at respiration was made artificial respiration was abandoned, and the heart ceased beating in about ten minutes.

Necropsy.—Blood-clot was found in the subdural space in the cerebellar fossa, continuous with a clot which distended the fourth ventricle and extended through the iter into the third ventricle.

CASE 2. *Basal meningitis; chronic internal hydrocephalus.*—The patient, a male aged twenty-seven years, complained of occipital and cervical pain shooting down to the shoulders and aggravated by moving the head. Five years previously he was said to have had a "sunstroke" and to have been "unconscious" for three weeks. Some months previously to admission he had repeated attacks of vomiting. During the last three months pain in the head and neck had appeared. The temperature on admission was 102° F., but fell to normal next day. The heart and lungs were normal, as was also the urinary system. There was tenderness as well as pain in the occipital region and part of the neck below it. There was no impairment of sensation and no paresis. The plantar reflexes were well marked, the patellar reflexes were exaggerated, and there was no ankle-clonus. Ten days after admission the patient became cyanosed and respiration ceased. After entire cessation both of costal and diaphragmatic efforts automatic movements of the lower jaw and alæ nasi persisted, and attempts at swallowing were made. Finally these movements also ceased. The pupils were regular, equal, and contracted, and the conjunctival reflex was present. As the heart continued to beat strongly it was deemed advisable to perform artificial respiration. The shoulders and neck were elevated, the head was thrown back, the tongue was drawn forward, and artificial respiration commenced. This was continued for an hour, strychnine and ether being meanwhile administered hypodermically. At the end of the hour slight attempts at breathing were made; these were continued and the patient recovered. Six days later he had a similar attack and recovered after artificial respiration. After several more such experiences he finally died eight days after the first attack.

Necropsy.—There were signs of both old and recent cervical and basal meningitis. The foramen of Magendie was occluded. There was hydrops of the fourth ventricle, iter, third ventricle, and both lateral ventricles.

CASE 3. *Cerebral hydatids.*—The patient, a male aged nineteen, had been operated on about three years before his present admission and a hydatid pressing on the motor area removed (Mr. Clubbe's case). Since leaving hospital he had enjoyed fairly good health, though being quite blind from optic atrophy following neuritis. He was readmitted with paralysis of the right arm of gradual onset. There was no vomiting. It was proposed to again open the skull, but on the morning of the projected operation his breathing suddenly became stertorous and finally stopped. Artificial respiration being carried on, his heart continued to beat for three-quarters of an hour.

Necropsy.—Four hydatid cysts were found at the posterior part of the left cerebral hemisphere. One was as large as an orange, the second about the size of a goose's egg, the third the size of a hen's egg, and the fourth had collapsed. The brain substance around was somewhat condensed. The largest cyst was bulging into the cavity of the left lateral ventricle.

CASE 4. *Malignant disease at the base of the skull.*—The patient, a female aged twenty-four, had had intermittent pains in the head for three years. The pain was described as commencing at the occiput and "shooting forward out of the right eye." Five months previously the sight in the right eye became so bad that she could not see to read on closing the left eye, and soon after this she noticed a difficulty in breathing through the right nostril. The nose was examined by a surgeon, who observed a mass at the back of the right nostril which he took to be a polypus and removed. Three weeks after the operation she had severe hæmorrhage, and this recurred some weeks later. Shortly after this she had another hæmorrhage, on account of which she was admitted to Prince Alfred Hospital. On admission at 2 P.M. the patient was found to be very anæmic; her pulse was rapid, but not very weak. She was very restless, throwing her arms about a good deal, and complained of thirst. The naso-pharynx was plugged, and a pint of normal saline solution was administered per rectum. At 10·30 P.M. the patient was very restless; the bleeding had ceased and the pulse had improved. She was given another saline enema, and also one-fifth of a grain of morphia hypodermically. At 12 midnight the patient's tongue fell back into the pharynx and she began to choke. On pulling forward the tongue and lowering the head she began to breathe again, but remained quite comatose and had no conjunctival reflex. The breathing, which was slow and stertorous, gradually became slower and finally ceased at 12.45. As the pulse was then good, artificial respiration was commenced and continued for two hours. For an hour and three-quarters the pulse continued fairly good and then gradually failed.

Necropsy.—There was a soft reddish tumour at the base of the skull pressing on the right temporo-sphenoidal lobe and displacing it to the extent of a space about as large as a hen's egg. The right crus was much flattened by pressure of the tumour. The latter had invaded and destroyed the sphenoidal and ethmoidal air cells on the right side and had invaded the upper part of the right nostril. The right side of the Gasserian ganglion and the optic nerve were involved in the growth.

CASE 5. *Basal meningitis, chronic internal hydrocephalus, syphilitic arteritis, and gumma of frontal lobe.*—The patient, a male aged thirty-seven years, had been ailing for two or three months with first giddiness and then headache. The eyesight had been gradually failing, so that he could not see to read. There was no numbness or anæsthesia. The patellar

reflexes were normal. The pupils reacted to light and accommodation. The tongue was dirty. There were diarrhœa and anorexia, but no vomiting. There was a slight history of alcohol and of syphilis contracted six years previously. About ten days after admission his pupils were observed to be unequal. A further examination of his eyes revealed the following facts. The pupils were unequal, the left circular diameter being 2 mm. and the right, which was vertically oval, about 4 × 3 mm. Both contracted well to near fixation, but were irresponsive to light. Vision of the right eye was = $\frac{6}{24}$, and that of the left = $\frac{6}{9}$. There was slight double optic neuritis. Three weeks after admission it was noticed that the patient's right arm was paretic. From this time onwards his condition went steadily from bad to worse, in spite of forty-five grains of iodide of potassium administered daily. There was marked mental deterioration—first, great emotionalism, and then increasing stupidity. Six weeks after admission his state was as follows. He had scarcely any intelligence and passed both urine and fæces involuntarily. There were paresis of the muscles of the right side of the face, including the orbicularis palpebrarum, marked exaggeration of both patellar reflexes, with patellar clonus and ankle-clonus on the right side. About seven weeks after his admission his respiration suddenly became slower and stopped. As his pulse was still good, artificial respiration was continued for about an hour and a half. Several times the artificial respiration was stopped until the radial pulse became almost imperceptible, then, on recommencing the respiration, the pulse regained its former strength. As after an hour and a half the patient made no attempt to breathe the efforts were abandoned.

Necropsy.—Endarteritis of branches of the basilar artery was found, also basal meningitis closing up the foramen of Magendie, and there was a gumma as large as a small hen's-egg in the left frontal lobe surrounded by an area of white softening.

CASE 6. *Cerebellar tumour; internal hydrocephalus.*—The patient, a female aged ten years, had had nine months before admission some abdominal symptoms diagnosed as tuberculous peritonitis. On admission the symptoms pointed to caries of the lumbar spine. Six weeks previously she had pain in the head and back, with "convulsions"; twelve days after admission she had another attack of "convulsions," leaving pain in the head and back accompanied by strabismus. The pupils were dilated and equal, and there was no paresis. The girl regained her previous condition. Nine days later she had another "fit," when respiration ceased, the pulse remaining strong and regular. The heart continued to beat while artificial respiration was carried on for over two hours.

Necropsy.—A tuberculous mass about the size of a hen's egg, but irregular in shape, was found in the roof of the fourth ventricle, protruding into that cavity and distending it, and at the same time invading the right lobe of the cerebellum. The iter was greatly distended, and to a less extent the third and lateral ventricles. A large amount of clear cerebro-spinal fluid escaped when the brain was being removed, through rupture of the dilated stalk of the pineal body.

Remarks.—Case 2 presents several very interesting features; the symptoms, which resembled a good deal those of caries of the upper cervical vertebræ, were dependent upon a basal meningitis. Probably also the supposed sunstroke five years before was of a similar nature. The cause is difficult to divine. It will be noticed that the conjunctival reflex persisted after attempts at respiration had ceased—exactly the opposite to what is observed in poisoning by chloroform and similar drugs. It seems remarkable also that the accessory movements of respiration should have continued after the essential ones had ceased. Another point of interest is the contracted state of the pupils in a patient dying from asphyxia. Perhaps the strangest feature of the whole case is that natural respiration should have recommenced at all, seeing that the cause of its failure still persisted. Case 4 is in one respect the reverse of Case 2, for the conjunctival reflex was lost before the efforts at respiration ceased. Case 5 presents several points of interest. The steady progress of the disease in spite of large doses of iodide of potassium is contrary to the usual experience. The development of such marked mental symptoms in connexion with a lesion of the left frontal lobe is interesting. A very remarkable point is the development of the Argyll-Robertson pupil while the patient was under observation. Apart from locomotor ataxy and general paralysis the phenomenon must be exceedingly rare. The one feature common to all these cases is that death was in all probability due to the increase in intra-cranial pressure causing paralysis of the respiratory centre in the floor of the fourth ventricle. In four of the cases recovery, complete or partial, was theoretically possible if the immediate cause of death could have been removed. Hæmorrhage, syphilis, and localised tubercle may all be recovered from, while in a fourth case death was clearly caused by a mere blocking of the foramen of Magendie. These are not selected cases, but are simply taken as they occurred successively. The question obviously suggests itself as to whether anything surgical could be done in such desperate cases. If the pressure in the fourth ventricle could be relieved it seems to us that recovery might be possible. If the foramina which connect the ventricles of the brain with the subarachnoid space were patent, then opening of this space would be all that was necessary. If, on the other hand, these were blocked, as occurred in four of our cases, then two possibilities suggest themselves: one is to give temporary relief by tapping one of the lateral ventricles, and the other is to trephine the cerebellar fossa and make an attempt to rupture the roof of the fourth ventricle. No anæsthetic would be needed, but considerable difficulty might be experienced in attempting to operate on the back of the head whilst artificial respiration was being carried on, owing to the position of the patient. It is scarcely likely that an automatic apparatus such as is used in a physiological laboratory would be found in a hospital.

A NEW BOBBIN FOR INTESTINAL ANASTOMOSIS.

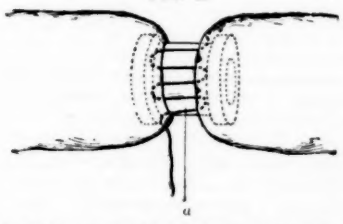
BY HERBERT WILLIAM ALLINGHAM, F.R.C.S. ENG.,
SURGEON TO THE GREAT NORTHERN HOSPITAL; ASSISTANT SURGEON TO ST. GEORGE'S HOSPITAL.

IT is with some hesitation that I venture to suggest a new bobbin for intestinal anastomosis, which appears to me to supply wants and to obviate faults, or rather disadvantages, noticeable in most of the other bobbins or buttons which have been designed. In my opinion some form of apparatus is necessary to unite hollow viscera one to the other. Now, a bobbin acts as a kind of splint while union is taking place, preventing any contraction or dilatation of the gut at the seat of union, and thus does away with any chance of leaking in the line of suturing. When no form of bobbin has been used, as in suturing by Mansel's or by Halsted's method, the seat of suturing has no support, and even a slight dilatation or contraction of the gut may easily allow some leak between the sutures to occur at the place of union. Again, rest and fixation favour union in the case of viscera, in the same way as with other parts of the body, and hence arises the necessity of a bobbin to secure that rest which is imperative for the sound joining of intestine to intestine, stomach to intestine, &c. It is thus seen that in intestinal anastomosis some plate, bobbin, or button is desirable, if not absolutely necessary.

Before describing my new appliance it may be allowable for me to point out some of the disadvantages in the plates, bobbins, or buttons which are the most frequently used in intestinal surgery. The bobbin designed by Mr. Mayo Robson appears to be the best, for it is made of decalcified bone, and as it is therefore absorbed there is no fear of its remaining for an indefinite time in the intestinal tract as a foreign body. The only disadvantage is that the flanges, or rather edges, at the ends of the bobbin are separated from one another by about three-fourths of an inch; hence, when viscera are being brought together, it is necessary to use some kind of suture running from one to the other, a process which takes some time to perform. (See Fig. 1, *a*.) Moreover, when the viscera have been brought together over the bobbin they can slip from one end of it to the other. At times, indeed, there is a fear of the bobbin slipping out from the seat of union, and this has actually occurred in one of my cases. Senn's plates appear to allow the edges of the incision in a viscus to fall together, and thus the communications between the viscera are too small later. This arises from the circumstance that while union is taking place there is nothing in the openings to keep them patent. It is obvious that this condition is rendered impossible by Mayo Robson's

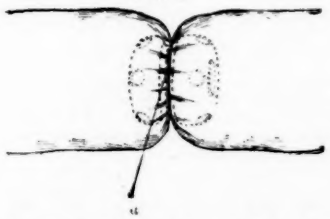
bobbin for by Murphy's button. With regard the latter there are several objections. It does not seem advisable that a hard metal button should be employed for anastomosis; for, in the first place, the button may be delayed in the intestine for a very long time, as in Lane's case, in which it did not come away even in 160 days. Again, when one considers the varying sizes of the ileo-cæcal valve it is readily conceivable that the button might be unable to pass the

FIG. 1.



valve and might cause obstruction at that situation. In gastro-enterostomy the button might fall back into the stomach and then be unable to pass the pylorus or be vomited through the œsophagus. Further, it is not judicious to press intestines together at their seat of union by a button which, as far as I can see, can come away only by absorption or by sloughing of the pressed parts which have been brought together between its two pieces. (Fig. 2, *a*.) In no other way

FIG. 2.



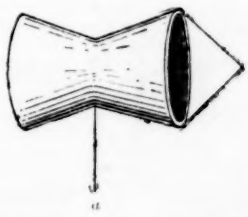
can the button free itself from the intestine at the seat of union. No less than five cases have come to my knowledge in which sloughing with perforation took place at the seat of union, the patients dying from the consequent peritonitis. It is perfectly sound to hold that the intestines at the seat of union should be kept together by pressure, but this pressure must not be too great or too small. Still, it is desirable to devise some mode of maintaining this pressure which will not necessitate any absorption or sloughing in order to free the button when the parts have been sufficiently glued together.

It is to remedy the various disadvantages indicated above that I have designed my bobbin. Its principle rests in the fact that it consists of two cones with their apices coming together to form the centre. The tubes are of bone or ivory, the shape of two hollow truncated cones with their lesser ends together, having the appearance of small dice-boxes. These are carefully decalcified to within about three-sixteenths of the centre (*a*), leaving at the junction of the two cones a hard, unyielding portion upon which any pressure from the sutures is borne. The ends of the tubes are quite soft. There are several sizes, the most usual being—

Diameter of bore.	Diameter of end (outside).	Length.	Angle of cones.	Known as—
½ inch.	¾ inch.	1¼ inch.	150°	No. 1 size.
¾ ,,	1 ,,	1½ ,,	140°	No. 2 ,,
⅞ ,,	1¼ ,,	1½ ,,	140°	No. 3 ,,
1 ,,	1¼ ,,	1½ ,,	140°	No. 4 ,,

They can be made in any other sizes required, but the above four sizes can always be had without delay from Messrs. Krohne and Sesemann, Duke-street, Manchester-square, W. This appliance is exceedingly simple and appears to serve all the purposes required of a bobbin or button, for it keeps the parts at absolute rest; can be absorbed, as it is made of decalcified bone; and can be liberated without any absorption or sloughing of the parts it unites. Moreover, from its shape it cannot, until the decalcified bone is absorbed, slip away from the seat of union, and when the sutures in each piece of intestine are tied the parts to be joined must be brought together, and yet no excessive pressure is exerted on the edges which it is desired to connect. As the bobbin may be used in various operations, it has been made in different sizes. Those for gall-bladder cases are one-fourth of an inch wide at the narrowest point—viz., the centre (Fig. 3, *a*); in

FIG. 3.



those for small-intestine cases, seeing that the intestinal contents are liquid, the width at the narrowest point need not be more than one-half or three-eighths of an inch. Much larger ones are required for large-intestine cases, as the intestinal contents are solid or semi-solid—viz., three-fourths of an inch. Though the bobbin may be employed to unite intestine to stomach, gall-bladder to intestine, and indeed in any form of anastomosis, its use may be most conveniently explained by presuming that two pieces of intestine are to be

FIG. 4.

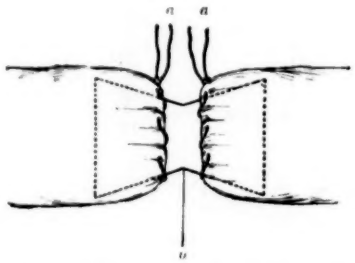
united end to end. Into or round each piece of intestine a fairly stout continuous silk suture is passed, which should include in each stitch the peritoneum, the muscular coat, and the mucous coat (Figs. 4 and 5). Then one end of the bobbin is inserted into one piece, and the suture is pulled tight by a knot twice threaded, so that it will not slip (Fig. 4, *a*), but the final tie is not made until the other end of the bobbin has been inserted into the other piece of intestine. After this, one of the sutures is tightened up to its utmost; this brings the part down to the centre of the

FIG. 5.

bobbin, for, as the bobbin consists of two cones with their apices pointing to its centre, the tighter the suture is drawn (Fig. 6, *a*) the more completely must it draw the intestine to the apex of the cone (Fig. 6, *b*) which has been inserted into it. A similar tying of the other suture brings the other piece of intestine down to the apex of its cone (Fig. 7, *a*). Thus, from the shape of the bobbin, the parts to be united are brought into exact apposition and at the same time are pressed together. A few Lembert's

sutures may then be inserted at various points, or a continuous Lembert's suture may be used all round if that be thought necessary. It is wise to scarify the peritoneum of the intestines with a needle for about half an inch round the seat of union. This scarifying promotes the exudation of lymph, which acts as a callus (just as in a fracture of bones) round the ends to be united. Especially should this be done if no Lembert's sutures have been employed. The intestines when united cannot move in either direction, for the sutures, which are tied up tightly at the narrowest part of their

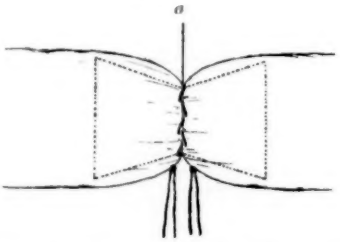
FIG. 6.



respective cones, naturally cannot slip up to any broader portion; moreover, the bobbin itself cannot possibly alter its position either upwards or downwards.

Murphy's button and Mayo Robson's button are sometimes blocked by solid fæces which have to travel through them for some distance (about an inch). Now, since my bobbin is shaped like an hour-glass, there is an extremely small surface to obstruct the passage of solid matter; this may be represented as being merely the extent of a line—i.e., at the meeting of the apices of the cones. This is quickly passed, and then the cones grow wide once more.

FIG. 7.



Simplicity is, I think, the characteristic of the bobbin. No complicated suturing is required, nothing being needed except the continuous sutures—one round one end of the divided intestine, and the other round the other end—or, in a similar manner, round the incisions, one in one viscus and the other in the other. Hence it can be applied very rapidly. Further, it cannot slip, and in consequence of its shape the parts to be joined are brought closely together. Lastly, it is absorbed in time and therefore cannot act as a foreign body. I have experimented many times with the bobbin on the dead body and find it is most easy of application, and the operation rapidly carried out. At present I have had only one opportunity of using it upon the living subject, and in this case with excellent results.

Grosvenor-street, W.

HEAVY FINES FOR ADULTERATING MILK.—At Southwark Police-court, on Tuesday, Aug. 27th, David Jenkins, of Guy-street, Bermondsey, and Joseph William Bramley, of Weston-street, Bermondsey, were summoned under the Sale of Food and Drugs Act, at the instance of Mr. Henry Thomas, inspector to the Bermondsey Vestry, for having unlawfully sold milk adulterated with added water to the extent of 19 and 18 per cent. respectively. The cases having been proved, Mr. Fenwick fined Jenkins, against whom there were previous convictions, £20 and 12*s.* 6*d.* costs, and Bramley £3 and 12*s.* 6*d.* costs.

SPINAL SOFTENING LIMITED TO THE PARTS SUPPLIED BY THE POSTERIOR ARTERIAL SYSTEM OF THE CORD.

BY R. T. WILLIAMSON, M.D. LOND., M.R.C.P.,
MEDICAL REGISTRAR, MANCHESTER ROYAL INFIRMARY, AND ASSISTANT IN MEDICINE, OWENS COLLEGE.

THE spinal cord is supplied with blood at its anterior part chiefly by a long narrow artery, the anterior spinal, and at the posterior parts by two long narrow vessels, the posterior spinal arteries. These arteries are reinforced by numerous small arterial twigs coming from the intercostal lumbar and sacral arteries, which enter the spinal canal by the intervertebral foramina and run along the anterior and posterior nerve roots. A number of small arteries, derived from the vessels on the surface, enter the substance of the spinal cord: the largest of these are the anterior median arteries, which penetrate the anterior median fissure. The exact distribution of these branches within the cord is described in most anatomical text-books. Now the blood supply of the cord may be divided broadly into the anterior and posterior arterial systems; and a transverse section of the cord may be divided roughly into two districts or areas—one supplied by small arteries coming from the anterior arterial system and the other by arteries from the posterior system.[1] The blood supply to the interior of the cord by the anterior spinal arteries is more important than that by the posterior arteries. The distribution of the lesions in a number of spinal diseases is related to the vascular supply, as I have pointed out elsewhere.[2] A spinal cord which I have recently examined furnishes a beautiful example of the localisation of the lesion to the part supplied by the posterior arterial system. During life the patient was under the care of Dr. Graham Steell, to whose kindness I am indebted for the opportunity of making the pathological examination.

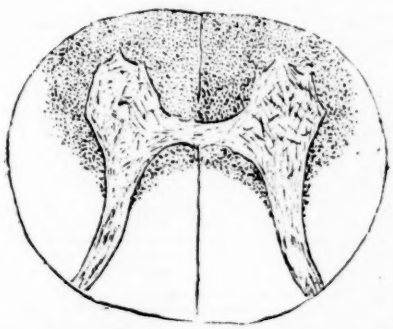
A man fifty years of age, suffering from paraplegia, was admitted as an in-patient to the Manchester Royal Infirmary on Aug. 29th, 1894. His previous health had been good until three weeks before admission, when he suddenly lost the use of his left leg immediately before getting into bed in the evening. He had just passed urine and was pulling off his stockings when he found that he was unable to raise the left leg. He thought that the right leg became paralysed soon afterwards. There was no pain in the back or limbs at the onset, but the legs felt numbed. He stated, however, that he could feel when anything touched his legs. Very soon after the onset of the paralysis the legs became painful, especially the left, and there had been dull, aching pain, with occasional sharp, shooting pains, in the legs ever since. Retention of urine had been present from the onset and a catheter had been passed daily. The legs had remained completely paralysed from the commencement. The arms had not been affected, and there had been no pain in the back. There is no history of syphilis or gonorrhœa or rheumatism. With the exception of two attacks of pleurisy (one eight years and the other twenty years before admission) the previous health has been good, until one month before the onset of the paralysis. At that date he began to feel languid, but was able to attend to his work quite well.

On admission to the infirmary the patient was somewhat wasted. Both legs were completely paralysed, and the feet and toes were "dropped." The legs were flaccid; the knee-jerks were present; there was no ankle-clonus; and the plantar reflex was present on the left side, but was not obtained on the right. The abdominal, epigastric, and cremasteric reflexes were not obtained. A light touch with the head of a pin was not felt on the right leg; a pin prick also was not felt. On the left leg both the point and head of a pin were felt and localised. On the abdomen the head and the point of a pin were not felt on the lower part—up to a point midway between the pubes and umbilicus; above this level both were felt distinctly. There was no zone of hyperæsthesia just above the anæsthesia. The patient could

[1] See Marie: Diseases of the Spinal Cord.
[2] See the Medical Chronicle, Dec., 1894, and Jan. and Feb., 1895.

distinguish hot and cold test tubes on both legs. The bladder was distended; there was retention of urine, with dribbling. There was also incontinence of fæces. There was no pain in the back, but the patient had considerable pain in the legs, especially when moved. The first lumbar vertebral spine was very slightly prominent, but there was no tenderness on percussion at this region. The arms were unaffected. There was no paralysis of the facial, ocular, or tongue muscles. When the edge of a silver coin was drawn firmly over the skin in any part of the trunk or limbs a peculiar bluish-black mark remained, and the patient's initials could be written quite easily on the chest and abdomen. The pulse was 105 and intermittent; one beat was missed in about every 10. The tension was normal, and the artery not atheromatous. There was a short systolic murmur limited to the apex, but the cardiac dulness was normal. Physical examination of the lungs and abdominal organs revealed nothing abnormal. The urine was dark in colour, ammoniacal, and very fœtid, the specific gravity being 1017. It contained a small amount of albumin and a deposit of triple phosphates, a few pus cells, mucus, and a few red corpuscles. By the end of October the anæsthesia had increased, and both legs were equally affected. The anæsthesia was most marked on the outer side of the leg, but, owing to the patient's dull mental condition, it was not possible to map it out accurately. At a later date the results of examination of the cutaneous sensibility were quite unreliable. Soon after admission a sacral bedsore developed and the general condition of the patient became gradually worse. He complained most of pain in the legs, which was very severe when the limbs were moved. The doubtful prominence of the first lumbar spine did not increase, and spinal tenderness did not develop. The reflexes remained the same as on admission, but the bladder symptoms and the bedsores became much worse, and the patient died on Jan. 2nd, 1895.

Post-mortem examination.—The body was found to be greatly emaciated. There was an extensive sacral bedsore. The pericardium was normal. Fibrous pleuritic adhesion was present on the left side. There was slight thickening of the cusps of the mitral valve. Tuberculous nodules were scattered throughout the right lung. The stomach, intestines, liver, kidneys, and spleen presented no important changes. The bladder showed well-marked signs of cystitis. The spinal column presented no signs of angular curvature or caries. There was no evidence of tumour growth in the vertebræ. The spinal cord appeared to be normal to the naked eye. On section the grey matter in the lumbar and lower dural regions was seen to be congested. The spinal dura mater was adherent in the lower dorsal and lumbar regions to the posterior surfaces of the vertebræ; otherwise the spinal meninges were normal. After hardening in Müller's fluid, the cord, on transverse section, presented to the naked eye well-marked degeneration in the posterior and lateral columns of the lower dorsal region for about two inches. These columns were much lighter in colour than the rest of the transverse section. Above and below the region just mentioned the usual secondary degeneration could be detected. The whole of the lower two inches of the dorsal region of the cord was cut into small pieces, which were embedded in celloidin, and sections made. Every third or fourth section was mounted and examined microscopically. Practically, therefore, the whole of the cord at the seat of the lesion was examined microscopically. The sections were stained according to the methods of Weigert and Pal, and also with logwood and eosin and with aniline blue black. The figure represents the appearance of a transverse section (stained according to Weigert's method) through the lowest dorsal region, at the part where the lesion was most intense. The black dots represent healthy nerve fibres in the white matter, the fine lines represent the small nerve fibres in the grey matter, and the blank part corresponds to the area of degeneration in which nerve fibres are very scanty or altogether absent. (In the sections stained according to Weigert's method this blank area is light brown.) In the figure nerve fibres are represented (by fine black lines) in the posterior horns of grey matter, but in a good number of sections the posterior horns were completely degenerated, and their black-stained nerve fibres absent. The degeneration affected the posterior columns, median and external, with the exception of a narrow zone, close to the grey matter of the commissure and to the neck of the posterior horn; it affected the region of the lateral pyramidal, the direct cerebellar, and the antero-lateral ascending tracts, and also extended a little farther forwards on the surface of the cord. Under a high power the part where the changes were most intense—i.e., the whole of the posterior columns, with the exception of the narrow zone adjacent to the grey commissure and to the neck of the posterior horn—was seen to be densely infiltrated with round cells—large mononuclear cells, compound fat granular cells, and leucocytes. The nerve fibres were absent, and only a few irregular fibres of neuroglia tissue were seen amongst the cell infiltration. The microscopical appearance was that of spinal softening. The bloodvessels were dilated and their walls studded with nuclei, but the vascular changes were certainly not so marked as is usually the case in so-called myelitis. A large portion of the degenerated area in the lateral columns presented similar appearances of softening (cell infiltration, &c.). In some of the sections these changes had extended into and destroyed the posterior horns of grey matter. In other sections at this level of the cord the changes were more chronic than those just described, but involved the same area in the posterior and lateral parts of the cord. The nerve fibres were scanty, or absent altogether; the neuroglia was greatly increased and presented round or oval spaces, from which the nerve fibres had disappeared; and the changes then resembled those met with in secondary degeneration or sclerosis. The grey matter of the anterior horns and the intermediate grey matter appeared to be quite normal. The ganglion cells and fine nerve fibres were brought out quite distinctly—by different methods of staining. The whole of the anterior white matter was normal. In some sections small ante-mortem blood-clots were found in the veins on the posterior surface of the cord, and in a few sections they were also found in the veins near the anterior median fissure. The clots in all cases consisted of numerous leucocytes with a few red corpuscles, and were always separated by a small space from the vessel walls. No clots were found in the spinal or meningeal arteries. The walls of the bloodvessels appeared to be normal except at the seat of the changes in the posterior and lateral columns. Above the seat of the lesion just described there were the usual ascending changes in the posterior columns (secondary sclerosis), and below there was the usual descending sclerosis in the lateral pyramidal tracts. Only in the lower two inches of the dorsal region of the cord were the above-described suffering and degeneration found in the posterior and lateral columns.



Section of spinal cord (Weigert's stain). Black dots and lines=healthy nerve fibres; the blank area=softening and degeneration.

Remarks.—The changes at the seat of the lesion I have described as spinal softening rather than myelitis, because the former term does not necessarily imply an inflammatory origin. The case is of interest on account of the localisation of the changes just to that part of the cord which is supplied by the posterior arterial system. If we compare the above figure (showing the distribution of the lesion) with that given by Marie (Diseases of the Spinal Cord) to show the distribution of the anterior and posterior arteries of the cord, we shall find that the blank area of degeneration corresponds almost exactly with the part of the cord which Marie maps out as that supplied by the posterior arterial system. The very sudden onset of the symptoms is also very suggestive that the lesion was of vascular origin.

Manchester.

THE RESULTS OF OPERATIONS FOR CANCER OF THE BREAST.

BY THOMAS JONES, B.S., F.R.C.S.,
SURGEON TO THE MANCHESTER ROYAL INFIRMARY AND PROFESSOR OF SURGERY IN THE OWENS COLLEGE;
AND
JOHN E. PLATT, M.S., F.R.C.S.,
RESIDENT SURGICAL OFFICER, MANCHESTER ROYAL INFIRMARY.

BEFORE a correct estimate of the true value of any operation can be formed it is necessary to consider the ultimate results with which it is attended. It is not enough to know what the immediate risks of its performance may be; we should also find out what are likely to be its remote effects. It seems to us that hardly sufficient stress is laid on this matter, and that we are too apt to be satisfied if the immediate results come up to expectation. These remarks apply with peculiar force to the operations performed in cases of malignant disease, and it is very possible that if we were more thoroughly acquainted with the late results of operation in such cases we might pause before we recommended our patients to submit to them. The accompanying table deals with all the cases of carcinoma of the breast which were operated upon by Mr. Jones at the Manchester Royal Infirmary during a period of ten years (1883 to 1892 inclusive). It gives particulars of the cases when they first came under observation, and also records the results of our inquiry into their after-history. This inquiry has been a work of considerable difficulty and labour, as anyone who has been engaged in similar work will know; the patients have been widely scattered, and difficulties have arisen from changes of residence and from many other causes. The table includes 55 cases, of which more or less information of the after-progress was obtained in 52 cases. In spite, however, of all our efforts we were unable to learn anything more about the remaining 3 cases. In the present paper we propose to deal in the first place with certain points which are illustrated by the histories given and the symptoms presented by the patients at the time they first came under observation; secondly, with the results of our inquiry into the after-progress of the cases; and, thirdly, with certain conclusions which we have deduced from a careful study of the facts now before us.

From an analysis of the cases we obtain the following particulars with regard to sex, age, family history, &c. All the 55 patients were women; no examples of cancer of the male breast have come under observation during the period under consideration. Seven patients were between the ages of thirty and forty, 30 between forty and fifty, 12 between fifty and sixty, 5 between sixty and seventy, and 1 was over seventy years of age. The great majority—more than half the cases—were thus between forty and fifty, the period of life at which cancer generally is most frequently met with. In 23 of the 55 cases the right breast was affected by the disease, in 29 the left breast, whilst in the remaining 3 cases the notes give no information upon this point. The nature of the growth was in all cases scirrhous; 2 were examples of atrophic scirrhus. A family history of malignant disease was obtained in 7 cases only (12·7 per cent.). In our table we have an account of a mother and daughter and the mother's sister suffering from cancer. The mother's sister (No. 3 in the list) is still living and free from recurrence, although the operation took place eleven years and three months ago. A history of previous breast troubles was given in 11 cases (20 per cent.). There had been abscess in 5, sore nipple in 3, sanguineous discharge from the nipple in 1, "broken breast" after confinement (probably abscess) in 1, and severe pain in the breast during suckling in 1. From this it appears that cancer is especially liable to occur in breasts which have been previously affected by abscess or other disease. A history of injury to the breast was obtained in 8 of the 55 cases. As to the duration of the disease before the patients came under observation, so far as we could learn the disease had in 11 cases been in existence for less than three months before operation, in 9 it had existed from three to six months, in 6 from six to nine months, in 15 from nine to twelve months, and in 9 from one to two years, whilst in the remaining 5 cases the duration is doubtful. It must not be forgotten, moreover, that the onset of cancer of the breast is usually insidious and that the disease has made very considerable progress before it is noticed by the patient. Frequently she discovers a tumour of large size whose presence has hitherto remained unsuspected. The great length of time which often elapses between the discovery of the tumour and the time the patient seeks advice is worthy of notice, since it allows the disease to become much more extensive and thus necessitates a more formidable operation and greatly increases the chances of recurrence. In 32 of the 55 cases the first symptom noticed by the patient was the presence of a "lump" in the breast, in 8 pain was the first symptom, and in 7 retraction of the nipple. In 1 case the patient noticed that the axillary glands were enlarged before she observed any swelling in the breast, and in 2 failure of the general health led to the discovery of the local disease. With regard to the state of the skin over the breast, in 34 of the 55 cases the skin was adherent to the tumour, in 10 of these being distinctly infiltrated by the new growth, and in 1 ulcerated. Several other cases showed dimpling when the overlying skin was pinched up between the fingers. The nipple was retracted in 37 cases, unaltered in 14, whilst its condition was not recorded in 4. In 2 patients it was ulcerated and in 2 the disease was preceded by inveterate eczema (Paget's disease). The axillary lymph glands were distinctly enlarged in 47 cases, apparently uninvolved in 7, and the glands along the pectoral muscle were alone involved in 1. It is very significant (and this has an important bearing on a point of practice which we wish to emphasise) that in 7, or nearly one-eighth, of our cases no enlargement of the axillary glands could be felt before operation, and yet enlarged glands were discovered when the axilla was opened. This proves that it is never safe to conclude that no enlargement of the axillary glands exists unless the examination of the space is conducted through the wound. This is especially true of those cases in which the axilla contains an abundance of fat, under which circumstances small shotty glands may, and very often will, elude detection. The supra-clavicular glands, in addition to those in the axilla, were slightly enlarged in 4 cases, and in these a speedy recurrence of the disease took place after operation; indeed, the operations in these cases were incomplete, as all the infected glands could not be removed. It would have been better if these 4 cases had been left untouched; they were manifestly unfit for operation.

Results of operation.—The ultimate results, so far as we have been able to learn, are as follows:—

Deaths soon after operation	2
Patients who have died without recurrence ...	2
,, ,, ,, from recurrence	34
,, now living with recurrence	8
,, ,, and free from recurrence ...	6
No further information obtainable...	3
	55

Of the 2 deaths which occurred whilst the patients were in hospital 1 (Case 42) took place eight weeks after operation from chronic bronchitis and dilatation of the heart. We think that this death ought not to be put down to the operation, since the patient recovered from its immediate effects and progressed favourably until shortly before her death. The other patient (Case 1) died four weeks after removal of the breast from septic absorption from the granulating surface on the chest wall. In this case it was necessary to sacrifice much of the skin over the breast, and a large raw surface was left; at the time there were several extensive burns with profuse septic discharge in the same ward. With regard to the technique of the operation the axilla was opened and infiltrated glands removed in 47 of the 55 cases, and it was not opened in 7. Unfortunately, the notes of the remaining case are very imperfect and do not give any information upon this point. In one case the affected glands so completely surrounded the axillary vein that a portion of the vessel had to be sacrificed, yet no inconvenience beyond a temporary œdema of the arm was experienced by the patient. In 4 cases only was it deemed necessary to remove a portion of the pectoralis major owing to the extension of the growth to the muscle. In 1 case (No. 37) the tumour, which was situated near the axillary border of the mamma, was excised with some adjacent tissue without taking away the entire breast. This is a method of operating strongly to be deprecated; it was followed by speedy recurrence of the disease which necessitated a second

OPERATIONS FOR CARCINOMA OF THE BREAST, PERFORMED BY MR. JONES AT THE MANCHESTER ROYAL INFIRMARY, FROM JAN. 1ST, 1883, TO DEC. 31ST, 1892.

Number.	Age.	Civil state.	Family history of cancer.	History of previous breast troubles.	History of injury to breast.	Skin.	Nipple.	Axillary glands.	Supra-clavicular glands.	Date of operation.	Axilla opened.	Recurrence.	Time of recurrence after operation.	Seat of recurrence.	Subsequent operations.	Duration of life after operation.	Remarks.
1	43	M.	No	No	No	Adherent	Retracted	Enlarged	Unaffected	Jan. 9, 1883	Yes	—	—	—	—	Died 4 weeks after operation from septic absorption.	—
2	36	S.	No	No	No	Unaffected	Not retracted	Enlarged	Unaffected	Jan. 26, 1883	Yes	Yes	10 years	Lungs	—	—	Patient still living.
3	53	S.	Yes	No	No	Unaffected	Retracted	Unaffected	Unaffected	Feb. 23, 1883	No	No	—	—	—	—	No recurrence 11½ years after operation.
4	46	M.	No	No	No	Adherent	Retracted	Enlarged	Unaffected	March 30, 1883	Yes	(Whole of growth not removed)	—	—	—	4 months	Operation incomplete; all the affected glands could not be removed.
5	52	M.	No	No	No	Unaffected	Retracted	Glands along pectoral muscle enlarged	Unaffected	April 10, 1883	Glands along pectoral remov'd	No	—	—	—	—	No recurrence 11½ years after operation.
6	42	M.	No	No	No	Firmly adherent	Slightly retracted	Enlarged	Unaffected	Aug. 18, 1883	?	Yes	12 months	Axilla	—	22 months	—
7	45	M.	No	Great pain in breast when suckling 3 years ago	Injury 5 yrs ago	Slightly adherent	Not retracted	Enlarged	Unaffected	Nov. 19, 1883	Yes	No further information can be obtained			—	—	—
8	65	S.	No	History of sore nipple.	No	Unaffected	Greatly retracted	Enlarged	Unaffected	Jan. 27, 1884	Yes	Yes	About 18 months	Chest-wall	Feb. 1, 1886: recurrent growth removed	About 2 years	—
9	46	M.	No	No	Blow on breast 9 m'ths ago	Unaffected	Not retracted	Enlarged	Unaffected	Feb. 8, 1884	Yes	Yes	?	Lungs	—	12 months	—
10	48	S.	No	No	Injury 3 years ago	Adherent and puckered	Slightly retracted	Enlarged	Unaffected	April 4, 1884	Yes	Yes	6 weeks	Chest-wall, axilla, and supra-clavicular glands	—	4 months	—
11	50	M.	No	Sore nipple 2 years ago	No	Adherent	Retracted and eczematous	Enlarged	Unaffected	April 29, 1884	Yes	Yes	?	?	—	About 12 months	—
12	44	M.	No	"Broken breast" after first confinement	No	Unaffected	Not retracted	Enlarged	Unaffected	June 16, 1884	Yes	No further information can be obtained			—	—	—
13	65	S.	No	No	No	Adherent and puckered	Retracted	Enlarged	Unaffected	Dec 16, 1884	Yes	Yes	12 months	Axilla	—	3 years	—
14	43	M.	No	No	No	Unaffected	Retracted	Enlarged	Unaffected	Jan. 27, 1885	Yes	Yes	?	Lungs (? in scar)	—	About 4 months	—
15	45	S.	No	No	No	Ulcerated and growth fungating	Not retracted	Enlarged	Unaffected	Jan. 31, 1885	Yes	Yes	3¼ months	Chest-wall	June 6, 1885: recurrent growth removed	19½ months	—
16	62	M.	No	No	No	Adherent and infiltrated	Greatly retracted	Enlarged	Unaffected	July 4, 1885	Yes	Yes	3 months	Chest-wall	Oct. 22, 1885: recurrent growth removed	9 months	—
17	47	M.	No	No	No	"Discoloured"	Retracted	Enlarged	One slightly enlarged gland	July 4, 1885	Yes	(Whole of affected glands not removed)	—	—	—	About 6 months	—
18	41	M.	No	No	No	Adherent	Retracted	Enlarged	One enlarged gland felt	Oct. 15, 1885	Yes	(Whole of affected glands could not be removed)	—	—	—	About 12 months	—
19	49	S.	No	No	No	Adherent and puckered	Retracted and ulcerated	No enlarged glands could be felt	Unaffected	Jan. 2, 1886	No	Yes	?	?	—	10 months	—
20	43	M.	No	No	Injury about 8 years ago	Unaffected	Retracted	Enlarged	Unaffected	Feb. 1, 1886	Yes	No	—	—	—	—	No recurrence 8½ years after operation.

OPERATIONS FOR CARCINOMA OF THE BREAST, PERFORMED BY MR. JONES AT THE MANCHESTER ROYAL INFIRMARY, FROM JAN. 1ST, 1883, TO DEC. 31ST, 1892.—*Continued.*

Number.	Age.	Civil state.	Family history of Cancer.	History of previous breast troubles.	History of injury to breast.	Skin.	Nipple.	Axillary glands.	Supra-clavicular glands.	Date of operation.	Axilla opened.	Recurrence.	Time of recurrence after operation.	Seat of recurrence.	Subsequent operations.	Duration of life after operation.	Remarks.
21	51	W.	No	No	Injury 6 m'ths ago	Unaffected	?	Enlarged	Unaffected	Feb. 3, 1886	Yes	No further information can be obtained			—	—	—
22	44	M.	No	No	No	Adherent	?	Enlarged	Unaffected	Feb. 27, 1886	Yes	No	—	—	—	—	No recurrence 8½ years after operation.
23	36	M.	No	Abscess 8 years ago	No	Adherent	Retracted and ulcerated	Enlarged	Unaffected	April 24, 1886	Yes	Yes	About 12 months	Chest-wall	May 20, 1887, and June 21, 1888: recurrent growths removed	14 months	—
24	54	M.	No	No	No	Adherent and infiltrated	Not retracted	Enlarged	Unaffected	May 18, 1886	Yes	Yes	6 months	Axilla	April 27, 1887: recurrent growth removed	2 years and 8 months	—
25	31	S.	No	No	Injury 2 years ago	Slightly adherent	Retracted	Enlarged	Unaffected	May 25, 1886	Yes	Yes	3 weeks	Chest-wall	Recurrent growth destroyed with Vienna paste	3 years and 10 months	—
26	39	M.	No	No	?	Adherent	Slightly retracted	Enlarged	Unaffected	July 23, 1886	Yes	Yes	?	?	—	About 5 years	—
27	53	M.	No	No	No	Adherent	Not retracted	No enlarged glands could be felt	Unaffected	July 31, 1886	No	No	—	—	—	About 3 months	Died from alcoholism; probably no recurrence.
28	46	M.	No	History of sore nipple	No	Adherent	Slightly retracted	Enlarged	Unaffected	March 26, 1887	Yes	Yes	About 3 months	Chest-wall and axilla	—	19½ months	—
29	56	W.	No	No	No	Adherent	Retracted	Enlarged	Unaffected	June 13, 1887	Yes	Yes	About 2 years	Axilla	Sept. 10, 1889: excision of glands	About 3 years	—
30	50	M.	No	No	No	Unaffected	Not retracted	Enlarged	Unaffected	June 18, 1887	Yes	No	—	—	—	—	No recurrence 7 years after operation.
31	68	W.	Yes	No	No	Unaffected	Not retracted	Enlarged	Unaffected	Sept. 7, 1887	Yes	Yes	18 months	Chest-wall and axilla	—	3 years and 1 month	—
32	43	M.	No	Sanguineous discharge from nipple 5 years ago and again 3 years ago	No	Infiltrated	Retracted	No enlarged glands could be felt	Unaffected	Nov. 8, 1887	No	Yes	About 5 months	Sub-peritoneal glands	—	6 months	—
33	47	M.	Yes	No	No	Infiltrated	Retracted	Enlarged	Unaffected	Feb. 20, 1888	Yes	Yes	About 6 weeks	?	—	4 months	—
34	42	M.	No	Abscess 10 years ago and again 7 years ago	No	Adherent and infiltrated	Retracted	Enlarged	Unaffected	May 17, 1888	Yes	Yes	5 months	Chest-wall	Nov. 2, 1888, and Oct. 13, 1890: excision of recurrent growths	3 years and 6 months	—
35	54	W.	No	No	No	Unaffected	Not retracted	Enlarged	Unaffected	Oct. 1, 1888	Yes	Yes	4¼ years	Chest-wall	Recurrent growth removed in summer of 1893	—	Patient is still alive.
36	42	S.	No	No	No	Unaffected	Not retracted	No enlarged glands could be felt	Unaffected	Jan. 29, 1889	No	Yes	?	Axilla	—	4¼ years	—
37	35	S.	Yes	No	No	Unaffected	Not retracted	Enlarged	Unaffected	May 23, 1889	Yes	Yes	About 3 months	Axilla	—	7 months	Cancer removed without removal of whole breast in Oct., 1888. Speedy recurrence.
38	46	M.	Yes	No	Injury 6 m'ths ago	Unaffected	Retracted	Enlarged	Unaffected	Aug. 1, 1889	Yes	No	—	—	—	—	No recurrence 5 years after operation.
39	50	W.	No	No	No	Adherent	Retracted	Enlarged	Unaffected	Sept. 26, 1889	Yes	Yes	9 months	Chest-wall	July 14, 1890, and Jan., 1891: excision of recurrent growths	3 years and 10 months	—

OPERATIONS FOR CARCINOMA OF THE BREAST, PERFORMED BY MR. JONES AT THE MANCHESTER ROYAL INFIRMARY, FROM JAN. 1ST, 1883, TO DEC. 31ST, 1892.—*Continued.*

Number.	Age.	Civil state.	Family history of cancer.	History of previous breast troubles.	History of injury to breast.	Skin.	Nipple.	Axillary glands.	Supra-clavicular glands.	Date of operation.	Axilla opened.	Recurrence.	Time of recurrence after operation.	Seat of recurrence.	Subsequent operations.	Duration of life after operation.	Remarks.
40	45	M.	No	No	No	Unaffected	Retracted	Enlarged	Slightly enlarged	June 6, 1889	Yes	Yes	About 6 weeks	Chest-wall and other breast.	—	3 months	—
41	33	M.	No	No	No	Infiltrated	Retracted	Enlarged	Unaffected	Feb. 3, 1890	Yes	Yes	5 weeks	Axilla	—	7 months	—
42	38	M.	No	No	No	Adherent	Retracted and eczematous	Enlarged	Unaffected	April 25, 1890	Yes	—	—	—	—	Died 8 weeks after operation from chronic bronchitis and dilated heart.	—
43	44	S.	No	No	?	Infiltrated	Retracted	Enlarged	Unaffected	July 15, 1890	Yes	No	—	—	—	8½ months	Died from bronchitis. No recurrence.
44	52	M.	No	No	No	Infiltrated	Retracted	Enlarged	Unaffected	Sept. 25, 1890	Yes	Yes	?	?	—	18 months	—
45	44	M.	No	No	No	Unaffected	Not retracted	No enlarged glands could be felt	Unaffected	Dec. 2, 1890	No	Yes	?	Uterus (no local recurrence)	—	9 months	—
46	56	M.	No	No	No	Adherent	?	Enlarged	Unaffected	Dec. 26, 1890	Yes	Yes	3½ years	Chest-wall	—	—	Patient still living.
47	46	M.	Yes	No	No	Adherent	Retracted	Enlarged	Enlarged	Feb. 3, 1891	Yes	(Whole of affected glands could not be removed)	—	—	—	7 months	—
48	71	M.	No	Abscess 33 years ago	No	Infiltrated	Retracted	Enlarged	Unaffected	June 26, 1891	Yes	Yes	Within 3 months	Chest-wall and axilla	—	5 months	—
49	49	M.	No	No	No	Unaffected	Retracted	Enlarged	Unaffected	Oct. 2, 1891	Yes	Yes	2½ years	Axilla	—	—	Patient still living.
50	66	M.	Yes	Abscess 26 years ago	No	Unaffected	Slightly retracted	No enlarged glands could be felt	Unaffected	April 29, 1892	No	Yes	3 months	Axilla	Sept. 29, 1892: removal of axillary glands.	—	Patient still living.
51	60	M.	No	No	Yes	Adherent	Retracted	Enlarged	Unaffected	May 13, 1892	Yes	Yes	19 months	Chest-wall and axilla	—	—	Patient still living.
52	39	M.	No	Abscess 17 years ago	No	Unaffected	?	Enlarged	Unaffected	Aug. 4, 1892	Yes	Yes	Within 6 months	Chest-wall and liver	—	12 months	—
53	60	S.	No	No	No	Adherent	Retracted	Enlarged	Unaffected	Aug. 11, 1892	Yes	Yes	18 months	Chest-wall	—	—	Patient still living.
54	53	M.	No	No	No	Unaffected	Not retracted	Enlarged	Unaffected	Oct. 5, 1892	Yes	Yes	5 months	Chest-wall	—	—	Patient still living.
55	67	S.	No	No	No	Infiltrated	Retracted	Enlarged	Unaffected	Nov. 29, 1892	Yes	Yes	5 months	Chest-wall	—	16½ months	—

operation, and the patient died seven months later. Our rule is to remove the entire breast, to dissect off the pectoral fascia, to remove portions of the muscle if necessary, to examine the axilla through the wound, and if the glands be infected to clear it out completely, the breast and the glands, along with the intermediate lymphatic tract, being removed together in one piece. The assertion is frequently made that the immediate risks to life are greatly increased by opening the axilla at the time of operation. We contend, however, that the clearing of this space need add little, if any, to the risks, provided the proceeding be conducted with due care, and we would again point out that in 47 of our 55 cases the axilla was freely laid open and its contents completely removed, and yet there was only 1 death. In some of the cases the dissection required in order to excise the glands was most extensive, the axillary vein being frequently exposed for some two inches of its length. We hold, therefore, that no operation for removal of cancer of the breast is complete unless the axilla is carefully examined through the wound. If the glands be enlarged, be it ever so slightly, their removal is imperative. To leave them is to court defeat, as early recurrence in this situation must be expected. The only possible objection to the universal adoption of the rule of examining the axilla through the wound would arise from the additional risk involved, and the contention that the risk is greatly increased by this procedure falls to the ground n view of the results obtained. There is one practical point in connexion with this part of the subject to which we wish to invite attention. It is this: great watchfulness is required on the part of the anæsthetist whilst the axilla is being cleared out; the amount of shock is sometimes considerable, and it is well not to push the anæsthesia too far at this stage. We have been led to dwell at some length on the mode of dealing with the axilla because one sometimes sees cases in which the mammary gland has been successfully removed, but the axilla left untouched or only imperfectly dealt with; the disease has speedily declared itself in the latter situation and has advanced with alarming rapidity, thus bringing the operation into disrepute.

Of the patients who recovered from the operation 2 have since died from other diseases without recurrence of the cancer, one (Case 27) three months after her discharge from excessive drinking, and the other (Case 43) after eight and a half months from bronchitis. Recurrence, including the 4 patients in whom the operation was incomplete, took place in 42 cases, of which 34 have since died and 8 are alive. The average duration of life after operation in the 34 cases was nineteen and a half months; it was under six months in 5, from six to twelve months in 10, one to two years in 9, two to three years in 2, three to four years in 6, and four to five years in 2. Of the 8 cases now living with recurrence the average time since operation is four years; the longest period is eleven years

and six months and the shortest two years. The date of recurrence after the removal of the breast was doubtful in 8 cases, within three months in 8, three to six months in 7, six to twelve months in 1, one to two years in 8, two to three years in 3, three to four years in 1, four to five years in 1, and after ten years in 1. The recurrent growth was situated in the axilla without recurrence in the cicatrix in 9 cases, it affected the cicatrix on the chest wall or its immediate vicinity in 19, and the internal organs without local reccurrence in 4 (lungs 2, uterus 1, and subperitoneal glands 1). The opposite breast became affected by carcinoma in a late stage of the disease in 4 of the 38 cases. Operations for the removal of recurrent growths were undertaken in 11, or just 20 per cent. of the total number of cases; of these, three had two subsequent operations. The rule with regard to recurrent growths should be to remove them whenever practicable and as soon as possible after they are discovered. The remaining 6 patients are living and show no signs of return of the growth, the time since operation being eleven years, and three months in two instances, eight years and four months in two others, seven years in a fifth, and six years in the sixth. Leaving out of consideration those patients who died soon after the operation, those who have since died from independent diseases, and those who cannot be traced, 6 cases out of 48 have no recurrence after periods varying from five to eleven years. If we adopt Volkmann's rule that if a patient is free from recurrence three years after the removal of the growth she is to be considered cured, we can claim that 12·5 per cent. of our cases were cured by operation. This rule, however, is not always correct, for recurrence sometimes takes place at a very late period; one of our cases had recurrence after ten years.

From a careful consideration of the foregoing facts we have drawn the following conclusions:—1. Cancer of the breast, although a formidable disease, is amenable to treatment by operation, and the proportion of cures so obtained may confidently be put down at 12 per cent. 2. Non-success after operation is very frequently due to the extensive character of the disease when it first comes under observation; probably if relief were sought earlier a much larger proportion of cures would be obtained. 3. Moderate enlargement of the axillary glands is no bar to operation or to a successful issue provided they are systematically and carefully removed and the axillary space thoroughly cleared. 4. It is well-nigh impossible to discover trifling enlargement of the axillary glands by an examination through the unbroken skin. 5. No operation for removal of cancer of the breast can be considered complete unless the axilla be examined through the wound, the additional risks of such a procedure being very slight. 6. The large number of cases in which recurrence occurs locally points to the necessity of very free removal of the disease; all doubtful skin must be taken away and great care must be exercised not to leave any outlying portions of breast tissue. 7. Operation is contra-indicated when the whole of the growth cannot be removed or when the supra-clavicular glands are enlarged. The only condition which might render an operation justifiable under such circumstances would be the presence of a foul cancerous ulcer, the removal of which is desirable on account of the great inconvenience which it occasions.

Manchester.

STATUS EPILEPTICUS; REMARKABLE NUMBER OF FITS; RECOVERY.

BY J. W. ALEXANDER, M.R.C.P. EDIN.,
LATE ASSISTANT MEDICAL OFFICER, LANCASHIRE COUNTY ASYLUM, RAINHILL.

THE following case of epilepsy, in which the patient recovered after having had an extraordinary number of convulsions, may be considered of interest. It occurred in a woman twenty-six years of age, who was admitted to Rainhill Asylum on Jan. 4th, 1890, suffering from mania with epilepsy. From the date of her admission till the end of December, 1894, she had on an average four fits per month; one to two days intervened, as a rule, between each, and at no time were more than five fits recorded in twenty-four hours. After each group of fits she became excited, the excitement frequently assuming the form of post-epileptic mania of a violent type. Bromide of potassium was taken by the patient in thirty-grain doses twice daily from the middle of May, 1891, till the middle of December, 1894. The series of convulsions which forms the subject of this communication began on Jan. 2nd of this year, a fortnight after the bromide of potassium was discontinued, and ended twenty-one days later. The aggregate number of fits recorded during these twenty-one days amounted to 3205, the daily total reading as follows:—

Jan. 2nd	... ...	16	Jan. 9th	... ...	159	Jan. 16th	... ...	96
,, 3rd	... ...	38	,, 10th	... ...	51	,, 17th	... ...	128
,, 4th	... ...	280	,, 11th	... ...	112	,, 18th	... ...	133
,, 5th	... ...	330	,, 12th	... ...	98	,, 19th	... ...	286
,, 6th	... ...	285	,, 13th	... ...	165	,, 20th	... ...	188
,, 7th	... ...	211	,, 14th	... ...	151	,, 21st	... ...	87
,, 8th	... ...	321	,, 15th	... ...	89	,, 22nd	... ...	3

The convulsions were almost entirely confined to the right side of the body, beginning in the arm and spreading rapidly to the head, face, and leg. The arm was flexed, the leg drawn up, and the head and eyes rotated to the right; occasionally the left leg was involved, and more rarely the left arm also. During the paroxysm urine was passed, but not fæces, nor was the tongue bitten. Each fit was a distinct entity, well marked and severe, but of short duration, generally lasting from about thirty to forty seconds, and separated from that immediately preceding and succeeding it by a period of semi or complete consciousness. There can be little doubt that the patient's recovery may be attributed to the fact that these periods existed and were taken advantage of to give her a sufficiency of nourishment. As to treatment, a brisk purge was administered at the outset, and 111 grains of chloral hydrate were given in the first twenty-four hours, followed during the second twenty-four hours by 105 grains of the same drug. Afterwards ten grains of bromide of potassium and ten grains of chloral hydrate were given every three hours till Jan. 17th, when the amount of each drug was increased to thirty grains every four hours at first, and less frequently as the fits decreased in number and severity. After the final cessation of the convulsions the right arm and leg remained completely paralysed for a fortnight; then the paralysis gradually passed off. At this time, the patient's mental activity having returned, an examination into the state of her nervous system was made. She complained of great pain in the right shoulder, which was purely due to passive or active movement; there was no hyperæsthesia; sensibility to pain and touch remained unimpaired; the motor speech mechanism was unaffected; ophthalmoscopic examination revealed no morbid change; there was slight wasting of the right arm and leg, and the tendon reflexes were brisk, that of the right patella more so than the left. Concerning the further course of the illness, the paralysis has now (April, 1895) completely disappeared, some slight stiffness of the shoulder alone remains, and no more fits have been recorded.

I am indebted to Dr. Wiglesworth, the medical superintendent, for permission to publish the case, and to Dr. Milne, who was acting as locum-tenens at the beginning of the patient's illness, for the earlier notes.

Armley, Leeds.

CIRRHOSIS OF THE LIVER.

BY FREDERICK J. SMITH, M.D. OXON., F.R.C.P. ENG.,
ASSISTANT PHYSICIAN AND SENIOR PATHOLOGIST TO THE LONDON HOSPITAL.

IN THE LANCET of Jan. 5th there is published a case by Dr. H. B. Donkin which is termed malignant jaundice or acute yellow atrophy. I quite agree with Dr. Donkin that the case is rare and interesting enough to be worthy of publication, but I wish to ask, Was the diagnosis correct? My impression, from a careful study of the report, is that it was a case of the disease which I believe the late Professor Charcot first definitely described—viz., hypertrophic cirrhosis. Before I give the actual reason in my mind for my opinion—viz., an analogous case with microscopical post-mortem examination—I would like to say something about the features of hepatic cirrhosis in general, if it be only to correct what I find is a widespread erroneous view of the condition taken by students. For clinical purposes cirrhosis may be classified as follows: (1) irregular local cirrhosis due to scarring from healed abscesses, gummata,

hydatids, &c.—in fact, any local disease or injury which has healed by scar; and (2) general cirrhosis (which may, however, in certain cases implicate only a lobe or less), of which the forms are (*a*) congenital syphilitic, (*b*) by contraction of the capsule, (*c*) alcoholic or portal, and (*d*) hypertrophic, biliary, or non-alcoholic. I do not propose to enter into any discussion on irregular cirrhosis or on Groups *a* and *b* of the general class, but I do wish to express an opinion on some points in the features of Groups *c* and *d*.

With regard to Group *c* I accept the generally received opinion that the clinical symptoms are produced by—or, in other words, that the pathology of the condition is—first, the appearance in the portal canal, and its smaller divisions, of numerous small round nucleated cells; secondly, the formation from these cells of fibrous tissue; and, lastly, the contraction of this fibrous tissue with consequent pressure effects. Such being the pathology, it is obvious that process No. 1 must *tend* to increase the size of the liver, while process No. 3 must tend to diminish it. If this be granted, then it must follow that the size of a cirrhotic liver depends upon the relative activity of processes Nos. 1 and 3. This leads me to the error mentioned above—viz., that students always say that a cirrhotic liver is large in the early stages, but subsequently becomes small. That such may be the tendency of the pathological process I am not prepared to deny, but I feel very confident that clinically the small cirrhotic liver is the exception and not the rule. While medical registrar to the London Hospital I very carefully noted the condition of the organ as regards size in all cases diagnosed by the physicians as "cirrhosis of the liver," and in fully two-thirds of the cases the lower border was noted as being palpable below the ribs, often as low as the umbilicus. My experience as pathologist also points in the same direction. I very seldom see a small cirrhotic liver, but frequently enough one as large as or larger than usual; in fact, the most typical example of the condition I ever saw (and of which I have a microscopical slide) was a liver which weighed ninety-six ounces. Leaving now alcoholic cirrhosis for a moment, I pass on to say a few words about hypertrophic cirrhosis, the pathology of which is perhaps best given by its synonyms hypertrophic, non-alcoholic, biliary, and intralobular. The existence of such a disease I am prepared to admit, partly on authority (Charcot and others), and partly on experience of one case reported to me by Mr. J. A. Jones of Aberavon, who kindly sent me for examination a portion of the liver and spleen. A full report of the case appeared in the Transactions of the Pathological Society of London for 1890. Microscopically, the condition was precisely that described by authority—viz., cells and cirrhosis actually invading the individual acini. This disease I believe to be exceedingly rare, usually occurring in quite young subjects and presenting typically a large liver and intense jaundice with nervous symptoms prominent—in fact, just the picture Dr. Donkin draws of his case; this constitutes my reason for asking him if his case could have been of this nature.

My remarks are intended to be of a clinical character, and it is a clinical point on which I wish to insist for the sake of clearness—viz., that when we meet with a case presenting the features of alcoholic cirrhosis (i.e., ascites &c., with but little jaundice), and the liver happens to be enlarged (as is most usually the case), we should use the term "cirrhosis with enlargement," reserving the term "hypertrophic cirrhosis" for those rare cases in very young subjects in which intense jaundice, nervous symptoms, and enlarged liver are the prominent features.

Christopher-street, E.C.

ENTERIC FEVER: A THEORY OF EVOLUTION.

BY W. L. CHESTER, M.B. DUBL.,
SURGEON-MAJOR, ARMY MEDICAL SERVICE.

THE recognition of this disease dates from about the middle of the present century. For convenience I propose to term the time preceding its recognition the "prehistoric period," and the latter times the "historic period" of the disease. I will first propound the following postulates: (1) that enteric fever existed during the prehistoric period; (2) that during the prehistoric period, the days when sanitation as now understood was unknown, the typhoid germ was everywhere abundant, and that the disease attacked all susceptible individuals during their infancy; (3) that in infancy the disease readily escapes recognition; and (4) that since the historic period—the days of sanitation—infants commenced to escape the infection, and then for the first time it became a disease of adolescence, and thus became recognisable by the physicians of the day. Whether the specific or the pathogenic theory is the correct one, it is equally difficult to suppose that a disease, avowedly depending on want of sanitation, should not have existed in the days when sanitation practically did not exist. How does it happen, then, that the older observers failed to recognise it? A common fever, with such well-marked and distinctive clinical and pathological features, could not well have escaped observation or be confounded with other disease by at least some of the clever and observant physicians of the day, and yet while the details of other diseases are recorded with considerable accuracy and skill, enteric fever alone, of all the general diseases, escapes notice.

The explanation now advanced is that during the prehistoric period, the days when there were no public water supplies, but each household depended on its own well, pump, or river, when waterclosets, sinks, or sewers, if they existed, were untrapped, when filth of every description reigned supreme—that in those days an infant had hardly made its entrance into the world before it was brought into contact with the typhoid germ, and, if susceptible, contracted the disease, thereby obtaining immunity in after-life. We know how difficult it is to diagnose enteric fever in infancy—without a thermometer almost impossible. The prehistoric mother would notice her infant ailing, hot, probably with tympanitic abdomen, and diarrhœa. The prehistoric practitioner would say teething or a gastric attack, and who at the present day would blame him? Post-mortem examinations on infants in those days were even rarer than at present. The prehistoric practitioner never had a chance of seeing an adult suffering from enteric fever, and thus we hold him excused. Since the historic period (the days of sanitation) this filth disease, which undoubtedly depends on want of sanitation, has first made its appearance—surely a paradox, unless the above explanation is accepted. The sanitary development made it possible for children to escape, provided they were bred in a sanitary area; as they became older, on removal to a place of less perfect sanitation, they for the first time came into contact with the contagium and contracted the disease. This view is borne out by the following facts, extracted from a communication by the special correspondent of THE LANCET.[1] "The average death-rate of Toulon from typhoid fever is equal to 1·85 per 1000 per annum, and in this respect Toulon ranks next to Havre as the worst town in France. Yet it is well known that no permanent resident of Toulon dies from typhoid fever. This curious and significant fact I described when writing about Toulon some eight years ago. Dr. Galliot of the French Navy brought this forward in an essay for which the Government awarded him a gold medal. On calling the other day on him he again confirmed the fact. The natives of Toulon seem to be proof against typhoid fever. The children between the ages of three and six years, with but few exceptions, suffer from what is called in France *fièvre muqueuse*—an ill-defined fever which, though rarely fatal, confers immunity from typhoid fever. Dr. Galliot has demonstrated that since 1854 no native of Toulon has died from typhoid fever unless he had lost his immunity by living for several years in a thoroughly healthy town and then returned to the impurities of his native town. The victims of typhoid fever at Toulon are the strangers who come to live there; of these, of course, the greater number are soldiers."

Further strengthening evidence is shown in the following, extracted from the *British Medical Journal*.[2] Dr. Low, writing on the use of the water of the River Trent, states: "Persons freshly coming into the valley seem to be more commonly attacked than those whose lives have been spent in the district and who have been drinking for years of the river, the explanation being that, in all probability, many native Trentsiders have had enteric fever in early life, and that perhaps the constant use of Trent water by those who have not had the fever enables them in some way to resist more or less the disease." Similarly, in India and Egypt, both insanitary countries (in this respect resembling England

[1] THE LANCET, July 8th, 1893.
[2] Brit. Med. Jour., March 10th, 1894.

in the beginning of the present century) in which enteric fever prevails much among Europeans, especially the English, while it is unknown, or almost unknown, among the natives, the contention being that the latter have passed through the disease in infancy. The enormous infant mortality in these countries is to some extent corroborative evidence. These views are further borne out by what one sees in the army. It has been a standing conundrum why this disease appears to increase year by year among the troops abroad, while a few decades ago it was unknown. The cause has generally been attributed to the youth of the soldier of the present day. But formerly there were always at least some young soldiers present with the colours, yet these did not contract the fever, while many cases of enteric fever in men of mature age—from thirty-five to forty-five years of age—have of recent years come under my observation. The deduction is that the recruit of former times had passed through the ordeal in infancy, while he of the present day, being a more carefully nurtured article, escapes the disease in his own country only to be stricken by it directly he arrives in the insanitary areas which are the normal condition of the ordinary tropical or subtropical station.

A well-known South African expression, used for cattle, exactly meets the case: the recruit of former days was "salted," he of the present day is not. To exemplify further. Suppose a recruit born and bred in the slums of an insanitary English town, where typhoid fever is endemic. He will in all probability have passed through an attack of enteric fever, if susceptible to it, before he enlists. He may then go abroad with impunity, so far as enteric fever is concerned. This was the class of recruit of old days, when insanitation was universal. But, on the other hand, suppose a recruit, born and bred in a highly sanitary area—and such areas are becoming more common every day,—he will probably never have come in contact with the contagium before he enlists, and, having no protection, contracts the disease on arrival in an insanitary area. The conclusion from the above would be that the more protection afforded by sanitation to individuals in their native area, the more liability for them to contract the disease on removal to less favoured places, and that in the army an increasing amount of enteric fever must be anticipated until the foreign stations are brought into a sanitary condition as perfect as those at home.

Citadel Hospital, Cairo.

Clinical Notes:

MEDICAL, SURGICAL, OBSTETRICAL, AND THERAPEUTICAL.

RETROVERSION OF THE GRAVID UTERUS; SPONTANEOUS REPOSITION AT THE END OF THE FOURTH MONTH.

BY RICHARD H. READ, L.R.C.P. LOND., M.R.C.S.

A MARRIED woman consulted me on Aug. 7th, 1894. She was thirty years of age and had had eight children in the past nine years. She said she was between the third and fourth months of her ninth pregnancy. She complained of pains in the bowels and her urine was scanty. She was, however, able to do her ordinary housework, although the pains were severe at times. According to her statement, she had no difficulty with micturition or defecation. A few days later I saw her again, when she complained of diarrhœa. Her symptoms subsided under medicinal treatment, but as she still complained of abdominal pain and backache I examined her at her own house on Aug. 14th. The abdomen was distended, but was not markedly tender on palpation. There was a hard tumour extending from the pubes upwards to the umbilicus. At first it felt much like a gravid uterus, but on closer examination fluctuation was detected. The patient said this swelling had increased rapidly during the past fortnight. Per vaginam a smooth, rounded, elastic swelling was found pressing forward the posterior vaginal wall. Pressure upon this caused severe pain. The cervix uteri could not be felt, although a careful attempt was made to reach it. I had no catheter with me on this occasion. Next day, on making inquiry, the patient adhered to her statement that her micturition was performed naturally. On making pressure on the vaginal swelling a small quantity of urine flowed, and on passing a fine elastic male catheter a quantity of urine sufficient to fill an ordinary utensil once and a half was drawn off. The cervix still could not be felt, and the pelvic tumour seemed as fixed and tender as ever. I prescribed an opiate and ordered poultices to be applied to the lower half of the abdomen. The further progress of the case is interesting, inasmuch as though complete retention of urine followed the first use of the catheter and the patient was for some time in a critical condition with the pelvic tumour apparently as fixed within the pelvis as ever, the induction of abortion otherwise than by puncture (aspiration) through the uterine wall was rendered practically impossible by the position of the os uteri. All reasonable attempts at placing the pelvic tumour in a normal position with the patient in the ordinary and genu-pectoral postures failed. She was now (Aug. 22nd) at the end of the fourth month of pregnancy, and I decided to patiently wait another week before attempting further treatment, since her general health was improving somewhat and there were no signs of mischief around the uterus. After keeping the bladder and rectum empty for five days I was rewarded on the sixth morning, when I found the pregnant uterus in its normal position and the patient able to pass urine in the natural way. On Jan. 22nd, 1895, I delivered her of a male child at term. As the pains ceased soon after the os had been dilated the application of the forceps was necessary.

Hanley, Staffs.

TREPHINING AND DRAINAGE FOR BASAL CEREBRAL HÆMORRHAGE; DEATH.

BY FITZWILLIAM R. A. EVANS, L.R.C.P., L.R.C.S. IREL.

IN November, 1894, I was asked to see a girl aged five years who was said to have been suffering from whooping-cough for about a month previously. On examination I found her to be healthy, well developed, but troubled by occasional paroxysms of cough. She had a very good family history and had until then escaped all the ordinary infantile diseases. On the fourth morning I was sent for as the child had been found "stupid." On my arrival she was lying on her back in bed, motionless, quiet, with slow respiration and pulse, and the temperature normal. She did not notice or respond to questions. Her eyes were open; the pupils were dilated but equal, and reacted slowly to strong light, otherwise accommodation seemed to be constantly and completely relaxed. The membranes of both ears were normal. She moved her limbs lethargically when their cutaneous sensibility was tested, but without utterance or change of facial expression. All other signs were negative, poison excluded. No positive diagnosis was made then or treatment prescribed. Next day, on visiting the patient, the mother told me that the child had not passed urine or swallowed even liquids since I last saw her. The eyes were now fixed, there being no strabismus, but slight right ptosis. The right pupil was widely dilated and would not react; the left was much smaller, with some reaction. With the ophthalmoscope I saw that the right retinal veins were very turgid, the left being much less so. The knee-jerks were greatly exaggerated, particularly on the left side. While there appeared to be a general sensory and motor paresis, there was decided left hemiplegia. To avoid undue prolixity I may say that I diagnosed rupture of a basal cerebral vessel on or in the vicinity of the right side of the pons, with local and general compression, caused most likely by a paroxysm of coughing. I had the patient carried to my surgery and placed on the operating table, my friend, Mr. Graves, giving a little chloroform at first, which, however, we soon dispensed with. I applied a three-quarter inch trephine over the right parietal bone. When the disc was removed the dura mater bulged tensely into the aperture. After the membrane was incised the brain protruded. I then passed a No. 6 gum-elastic catheter downwards between the dura mater and the brain to the tentorium, along which the catheter seemed to slip to the neighbourhood of the pons. Uniformly blood-stained cerebro-spinal fluid to the amount of about three ounces escaped in the hour during which the catheter was allowed to remain *in situ*. The tension decreased, the pupils, especially the right, contracted and reacted, and the patient moaned. However, she never regained more than partial consciousness and died ten hours afterwards.

Remarks.—I selected the catheter in preference to a trocar, as from its flexibility it could follow the course of the tentorium without wounding the sinuses or bloodvessels. Unfortunately, I could not obtain a necropsy, but I think that the history, signs, suddenness, and the result excluded everything except hæmorrhage. In the ordinary cases of compression, where the clot can be trephined over, the procedure is easy enough, and the results are often satisfactory. If any of the readers of THE LANCET—especially general practitioners, like myself—have performed this operation successfully I should like to ascertain their *modus operandi*.

Birmingham.

SKIN ERUPTION WITH RISE OF TEMPERATURE SIMULATING MEASLES.

By JAMES ROBERTSON, M.B., C.M. GLASG.

THE following case having occurred on board a Transatlantic steamer may perhaps be of interest to medical officers of such vessels. The patient was a boy aged seventeen months, the child of Polish Jews on their way to the United States of America. Two days before embarking he was found to have on the centre of his left thigh a deep circular sloughing ulcer an inch in diameter and with inflamed edges. The child was otherwise normal; there was no syphilitic history or sinus leading to bone. The ulcer probably resulted from an abscess; it was washed and dressed. Next day the child's pulse and respiration were quick, his temperature was 101°F., and on his legs and arms there was a well-defined measly rash elevated and arranged in circles; a similar rash, though in a slight degree, was also apparent on the body. On the following day the child's condition was unchanged and he was taken on board the ship. The mother and five other children ranging from three years to twelve, along with the patient, were all kept in hospital during the voyage. On the second day at sea the rash disappeared, having continued four days in all, the ulcer assumed a healthy healing character, and the child became otherwise normal. He had no coryza or cough and throughout took his food well. Was this a mild case of measles or was it a rash simulating measles, but really due to absorption of some poison from the ulcer? None of the six children ever had measles; this child was the only one affected. There was no case of measles in the district where the family lived prior to embarkation, and no case occurred during the voyage.

Abbotsford-place, Glasgow.

TRIGEMINAL NEURALGIA AND NASAL DISEASE.

By MAYO COLLIER, F.R.C.S.

WITHIN the last twelve months two cases of severe and persistent facial neuralgia that up to then had defied all treatment have come under my care; they were referred to me by my colleagues, Dr. Guthrie and Dr. Cagney of the North-West London Hospital. I have postponed till now publishing an abstract of these cases in order to try the validity of the cures by the test of time.

The first case was that of a man aged fifty who was for some time under the care of Dr. Turner, of the Hospital for Epilepsy and Paralysis, Regent's-park, and I am indebted to him for the early notes of this case. In short, this man had suffered severely for the last four years, and latterly the frequency, duration, and intensity of the attacks had made life almost unsupportable. An examination of the nasal cavities revealed extensive disease of the middle turbinated bone on the right side. The removal of this resulted in almost immediate as well as permanent and complete cure. The second case, that of a female aged thirty-eight kindly sent me by Dr. Cagney, was on all fours with the man's case, only of longer duration (twelve years) and at times greater intensity. An examination here revealed disease in the same situation, and the same fortunate result followed its removal. Of the many recorded cases of trigeminal neuralgia I find few attributed to nasal disease, but taking into consideration the wide distribution in the nasal cavities of the many branches of the nasal ganglion on the second division of the fifth nerve, it is not surprising that a considerable number of these cases are, in fact, due to irritation in one form or another of the branches of this nerve in the nose.

Harley-street, W.

A Mirror OF HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

ST. MARYLEBONE INFIRMARY.

A CASE OF GRAVES' DISEASE ASSOCIATED WITH IDIOPATHIC MUSCULAR ATROPHY; REMARKS.

(Under the care of Dr. LULLUM WOOD BATHURST, late Second Assistant Medical Officer.)

A YOUTH aged twenty years was admitted into the St. Marylebone Infirmary complaining of difficulty in walking and weakness of his muscles. About fourteen months previously to his admission he found that in walking he bent over very much to the left side, and this caused his left ankle to ache; he then noticed that the toes of the left foot began to drop and the heel was drawn up so that he could not put it to the ground, and this has grown progressively worse up to the present time; for about two months previously to admission the right heel was being drawn up in the same way. He has had no actual pain in the limb, and only after walking for some time has he an aching sensation in the limbs, chiefly in the left ankle and thigh. For the last four months prior to admission he was unable to follow his employment, which entailed a good deal of walking. He has always enjoyed good health, never suffered from rheumatism or syphilis, and never drank to excess. His father died from phthisis. There is no history of any nervous complaints in the family. The patient is a tall young man with deeply pigmented skin and prominent eyes. His intellect is good. Though the exophthalmos is well marked von Graefe's sign cannot be obtained; the palate is highly arched; there is a prominence in the front of the neck corresponding to the position of the thyroid gland, and the swelling rises with deglutition; there is distinct pulsation over the tumour, but no dilated veins are visible. Slight tremors of the fingers are noticeable on the hands being held out in front of him. The skin of the body is very dark and of pigmented appearance, especially so on the face and abdomen. He complains of palpitation at times, though it does not worry him much. The apex beat is in the fourth space one inch outside the nipple line. The impulse is diffuse, forcible, and heaving. A thrill is felt over the cardiac area; cardiac dulness is increased slightly in an outward and downward direction. The first sound is loud and at times is accompanied by a short but distinct systolic murmur; this is not always audible. The heart's action is irregular and quick. As for the arms, the deltoids are somewhat wasted but can be put into action. The biceps muscle in each arm is almost completely wasted, and they appear to be simply fibrous cords, much contracted, so that the forearms cannot be completely extended. He cannot flex the elbows at all except by the weight of the forearms, for the biceps, brachialis anticus, and coraco-brachialis are atrophied. The power of extension of the elbow-joints is good, the triceps on each side acting well. He cannot pronate or supinate the forearms by muscular action, but there is slight power in the supinator longus. The upper arms are much wasted, but the forearms do not appear to be so. There is very slight power of extension of the wrists; power of flexion is fairly good. The tendon of the flexor carpi radialis is very prominent at the wrist, and on his flexing his hand a distinct clonus is felt in it. Coming to the thumbs, flexion and extension of the phalangeal joints are quite normal, but there is practically no power of flexion, extension, adduction, or abduction of the metacarpo-phalangeal joints. There is great wasting of the thenar eminences. In the face no paralysis, weakness, or wasting can be detected. On examining the neck, the sterno-mastoids and the anterior muscles of the neck seemed to be normal in size and contractile power, but the muscles of the back of the neck were rigid and contracted. He can hyper-extend the head—i.e., flex it on the back—easily, but cannot flex the

head on the sternum; this seems to be due to contraction of the posterior cervical muscles, for the anterior muscles are felt to be put into powerful action on his attempting to perform the act. As for the back, there is a lateral curvature in the dorsal region, with the concavity to the left, and a compensatory curve in the opposite direction in the lumbar region. The spinal muscles on the right side in the lumbar region are greatly thickened and feel like contracted tendons. The spine is kept absolutely rigid and cannot be flexed; this, as in the case of the neck, is due to the contracted condition of the erector spinæ. There is considerable lordosis of the lumbar spine. The trapezii on both sides act well and powerfully; the shoulders can be shrugged and thrown back. The serrati magni appear to be weak, and lunging can be only imperfectly performed; the vertical edges of the scapulæ stand out prominently. The angles of the ribs are more prominent on the right side, with corresponding prominence of the left side of the chest in front. The respiration is partly thoracic and partly abdominal; the recti and other abdominal muscles contract well. There is some wasting of the muscles of the thigh and calf in either leg, but the muscles contract well, with the exception of the gluteal muscles, which are soft and flabby, and have scarcely any power of contraction. The feet are in a position of talipes equino-varus, especially the left, the head of the astragalus on that side being very prominent. The toes of the left foot are dorsiflexed at the metatarso-phalangeal joints, and the heel is drawn up; the same condition exists in the right foot, but to a much less extent. Neither foot can be everted, nor can the feet be dorsiflexed at the ankle-joints. On attempting to do so the deformity is increased. Coming to the nervous system, sensation both to touch and to heat and cold is good. The pupils react to light and accommodation, and there is no abnormality in the retinæ. The patellar reflexes are absent; the plantar reflexes are normal or rather exaggerated; while the cremasteric and abdominal reflexes are very active. The reaction of the muscles to faradaism is rather increased, otherwise electric excitability is normal. In walking neither heel can be made to touch the ground, the patient treading only on the balls of his toes with the heels about three inches from the floor. He is very unsteady, the knees knocking together and the feet tending to cross. The body rolls from side to side. There is extreme lordosis of the lumbar spine, and the gluteal muscles are quite relaxed. When lying flat on his back he cannot raise himself into a sitting posture without the help of his arms; on attempting to do so he raises himself a little by the aid of his abdominal wall muscles. The inability must be due either to weakness of the anterior spinal muscles (psoas and quadrati lumborum), together with the abdominal wall muscles, or to the intense rigidity and contraction of the components of the erector spinæ; probably the latter would be quite sufficient to account for it. Having been helped into the kneeling posture he is quite unable to rise without aiding himself with his arms. This, again, shows the inaction of the glutei muscles, which are quite flaccid during the attempt. On raising him on to his legs he is able easily to straighten the back up into the erect position without pushing off his thighs. He is quite unable to rise from a chair unaided by his arms. There is no incontinence or retention of urine, and he has good control over the sphincters.

Remarks by Dr. BATHURST.—Dr. Beevor, who saw the case several times and took great interest in it, was of the opinion that it was one of exophthalmic goitre associated with idiopathic muscular atrophy, but it was possible that it might be an unusual form of pseudo-hypertrophic paralysis. He regarded the contracted condition of the erector spinæ as most unusual. For permission to publish this case I am indebted to Mr. J. R. Lunn, medical superintendent of the infirmary.

SALVATION ARMY SHELTERS AND SMALL-POX.—On Aug. 27th at Clerkenwell the police reported that a cab-driver, who was remanded last week on a charge of stealing from Upper-street, Islington, a horse and hansom cab, value £76, the property of Arthur Thomas Young, was unable to attend the court. Since he had been on remand he had developed small-pox, and had been removed to the hospital When charged he gave his address at the Salvation Army Shelter, Charles-street, Hatton-garden.

Reviews and Notices of Books.

A Text-book of Physiology. By M. FOSTER, M.D., Professor of Physiology in the University of Cambridge. With Illustrations. Sixth edition. Part II. London: Macmillan and Co. 1895.

THIS part embraces the tissues of chemical action with their respective mechanisms and nutrition. It, therefore, includes salivary, gastric, and intestinal digestion, respiration, and the lacteal, the urinary, and cutaneous secretions. We suppose that the last chapters had gone to press before the author had the opportunity of hearing of the remarkable experiments of Professor Schäfer on the action of the extract of the medullary portion of the adrenals on the blood pressure. So short a period has elapsed since the appearance of the last edition of this part of Professor Foster's work that little is required to bring it up to date. The present part has, however, been increased by about forty pages, and it possesses a separate index, which was much required in the editions of 1891 and 1889.

The additions to and corrections of the text that have been made are in the earlier sections very slight. Thus, for example, whilst in the previous edition it was stated that the branches of Auerbach's and Meissner's plexuses were distributed to the muscular coats of the stomach, in this edition it is added that, whilst many of the fibres are thus distributed, others go to the muscular fibres of the blood-vessels, and some, there is reason to think, "are destined for the glands and end in delicate arborescent terminations in contact with the substance of the cells." It is of such intercalations that the increase in bulk is made up, and the work is maintained as a whole at the high level it has reached.

Medical Handbook of Life Assurance for the use of Medical and other Officers of Companies. By JAMES EDWARD POLLOCK, M.D., F.R.C.P., Consulting Physician to the Hospital for Consumption and Diseases of the Chest, Physician to the Imperial Life Office &c., President of the Life Assurance Medical Officers' Association; and JAMES CHISHOLM, General Manager and Actuary of the Imperial Life Insurance Company. Fourth edition. London, Paris, and Melbourne: Cassell and Co. 1895.

ALTHOUGH the study of the medical questions involved in life assurance tends to become a special department of practice, the subject is one with the general details of which all medical men ought to gain some acquaintance. Proposers often consult their ordinary medical adviser before opening negotiations with an office, and in the numerous cases where the life is neither young nor first class, regarded from an assurance point of view, the family practitioner is not unlikely to be referred to by one side or the other in the course of the business. Dr. Pollock is to be congratulated on his success in providing for his professional brethren a handy and reliable guide to this complicated subject, in which mere precision of physical examination has to be so largely supplemented by the practical teachings of mature experience, by inferences from family histories, and by intuitive generalisations which not everyone can accomplish profitably. His directions for the investigation of cases aim at the eliciting of all the facts. The proposer's interviews with the medical man acting for the company should invariably be private, the interrogatories should be suave and tactful, the physical examination of the chest and abdomen should in all cases be made next the skin, and chemical examination of the urine in every instance is recommended. Albuminuria formerly existing, but followed by a period of perfect health continuing for years, need not disqualify. Albuminuria presently existing and known to have existed for years in persons of otherwise perfect health may justify assurance for a

short period with an addition to the premium. Cases of albuminuria associated with symptoms of Bright's disease, cardiac disease, gout or rheumatism should be declined. Glycosuria should forbid acceptance of the life, but if it has entirely disappeared for some years the life might be insured with some addition to the premium. Gout and intemperance are prominent among the conditions which result in loss to the insurance company. Dr. Pollock accordingly devotes much attention to them, and explains how these extra risks have to be met either by additions to the age or additions to the premium. The inferences to be drawn from the results of physical examination are explained in much detail, and readers will be greatly assisted in their comprehension of the subject by a series of one hundred typical cases selected from the records of various offices. In these the leading clinical symptoms are summarised in a line or two, and such extra rating as may be based thereon is also shown.

Chemistry of Urine. A Practical Guide to the Analytical Examination of Diabetic, Albuminous, and Gouty Urine. By ALFRED H. ALLEN, F.I.C., F.C.S. London: J. & A. Churchill. 1895.

MR. ALLEN'S contributions to the literature of analytical chemistry are well known and highly valued, because a critical and practical examination of the processes which he describes brings home the assurance that the author speaks not only of that he knows about, but of that he has tried. Analytical chemists have long recognised his work on "Commercial Organic Analysis," which we have reviewed in these columns,[1] as a distinctly reliable book of reference on all matters pertaining to the analysis of various organic stuffs. It contains just those precautionary injunctions and recommendations as to the best and most satisfactory methods of analysis which only practical acquaintance can enable an author to write about with any real or useful purpose. We welcome, therefore, the issue by the same author of a work on urinary analysis, since it is reasonable to suppose that the same confidence may be placed in the observations which he is led to make as to the merits and demerits of the various analytical methods that have been suggested and employed in the important task of differentiating between a healthy and a morbid urine. It is remarked in the preface that a considerable portion of the contents of the book was designed to form part of the concluding volume of the work we have already alluded to—"Commercial Organic Analysis"—Part 3 of Vol. III. of which deals mainly with substances of animal origin, and which he announces will complete the chief literary work of his life. "Of late, however," he goes on to say, "circumstances have led me to devote much attention to the chemical examination of urine, especially in relation to certain pathological conditions of great importance in Life Assurance reports [why life and assurance in capitals, by the way?] as well as in clinical diagnosis and prognosis. These examinations have caused me to investigate critically a large number of the analytical methods which are in vogue for the examination of urine, especially for sugar and albumin, and to confirm or disprove certain statements generally accepted as facts." The publication of the work is sufficiently "up to date" as to have admitted of a digest of the opinions expressed, amongst others, by Dr. Pavy, Sir George Johnson, Dr. Halliburton, and Mr. Allen himself on the somewhat vexed question of the presence of a small quantity of sugar in normal urine, which formed the subject of considerable and lengthy correspondence in our columns early in the present year.[2] The last word, as the author admits, is doubtless yet to be said. And there still probably remain some important points to be cleared up in regard to the possibly disturbing effects of the reagents used in the processes employed for the separation of the sugar, and the question of their action upon bodies not sugar. The book is not burdened with details of processes out of use or of those methods merely now of interest in connexion with the history of the subject; but it is a clear and practical guide to the analytical examination of urine, giving concise and readily comprehensible directions of only those processes which are worthy of recommendation or which, in other words, involve a minimum of trouble, occupy a reasonably short time, and yet afford accurate results—points which are of primary importance to the busy practitioner. One omission has come under our notice—there is no mention of Pettenkofer's well-known and useful test for biliary pigments. We may add that we have found this test more satisfactory by substituting a solution of glucose in strong sulphuric acid for ordinary cane sugar, which is apt to char and therefore to mask any colour that may be produced. Glucose may be dissolved, with little change of colour, in strong sulphuric acid, and when a few drops of this solution are allowed to fall into the centre of a small pool of urine upon a white plate the play of colours due to biliary pigments may be seen under very advantageous conditions.

[1] THE LANCET, Dec. 13th, 1886; Sept. 28th, 1889; and Jan. 14th, 1893.
[2] THE LANCET, January, February, and March, 1896.

Conventional Lies of our Civilisation. By MAX NORDAU. London: William Heinemann. 17*s*.

"WHAT is truth?" was a question asked upon an occasion which, *pace* Max Nordau, had a great influence upon the future course of the world, and in this book—an earlier work than "Degeneration"—Max Nordau has set himself to answer the question more or less.

The whole civilised world, according to him, is hollow and rotten; we are all miserable and striving to get away from our age and its disappointments, and the reason of this pessimism is that all our institutions, all the existing conditions of the world, are at war with our recent convictions. Religion, kings, aristocracy, marriage, and everything else are all lies, and according to Max Nordau everyone knows them for such. We leave it for skilled casuists to decide whether a lie which everyone knows to be a lie is really so, and we doubt whether if we all lived in the Palace of Truth we should be much happier. To "let innumerable cats out of unnumbered bags" would not in the least degree lessen social inequalities or reduce the number of illness, but despite Max Nordau's gloomy views the world is a better place than it was and men are grown kindlier one towards another.

The book is well worth reading, for if anyone is inclined to quarrel with this age he will be more satisfied with it when he has read this indictment of modern life.

OUR LIBRARY TABLE.

Bulletin de la Société de Pathologie et d'Hygiène Coloniale. Paris: Paul Lemaire. 1895.—This is a monthly publication, which began with this year and consists of thirty-two pages. As is only natural, our neighbours are chiefly interested in the tropical diseases which affect their colonies, and most of the contributions have, so far, had reference to Madagascar, Haïti, the Lower Senegal, Tonquin, the Niger, Tunis, and the French Soudan; but we see in the June and July numbers that a translation is published of Dr. Sandwith's paper on Anchylostomiasis, which first appeared in our columns.[1] Some very useful advice has been given to intending colonists who desire to preserve their health, and in the

[1] THE LANCET, June 2nd, 1894.

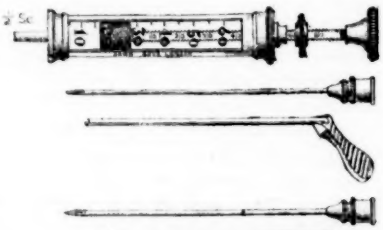
interests of tropical medicine we gladly welcome this new arrival.

Diabetes and its Treatment. By A. VINTRAS, M.D. London: Baillière, Tindall, and Cox. 1895.—This little book of twenty-four pages does not pretend to discuss the difficult question of the pathology of diabetes, and the treatment recommended is the lithia and arsenic method recommended by Dr Martineau, which Dr. Vintras has adopted on the principle of having seen very good results accruing from it. The diet, rules, and hints at the end of the book will be much appreciated by the diabetic as helping to vary the monotony of his food.

New Inventions.

A MODIFICATION OF THE EXPLORING TROCAR.

I BEG to introduce to the profession a modification of the exploring trocar which I think will be found to be useful in the treatment of such collections of fluid as localised empyemata, abscess of the lung, and deep abscesses of the neck and pelvis. I have experienced in my own operations and witnessed in those of others sometimes a difficulty in cutting into an abscess which has been proved to exist by the ordinary exploring needle, and it struck me that if we had a guide on the needle that could be left *in situ* after the needle was withdrawn some operations would be greatly facilitated. I have therefore had made a fine director, to which a suitable handle is attached, fitted on to an exploring



needle. The director very slightly increases the thickness of the needle. The instrument is used with the director encasing the needle; pus having been found, the syringe and needle are withdrawn together, and the director, which can be held steady by the firm handle, serves as a guide for a knife, or in dangerous regions for a sinus forceps to be run down the groove. The instrument has been excellently made for me by Messrs. Down Brothers, 5 and 7, St. Thomas's-street, London, S.E.

ARTHUR W. PRICHARD,
Surgeon, Bristol Royal Infirmary.

COINCIDENCES IN PRACTICE.

By WILLIAM O'NEILL, M.D., M.R.C.P. LOND., &c.,
LATE PHYSICIAN TO THE LINCOLN LUNATIC HOSPITAL AND PHYSICIAN TO THE LINCOLN GENERAL DISPENSARY, &c.

So many coincidences are met with in the course of medical practice that it would almost seem that diseases and accidents, like sorrows, never come singly. The only cases of glanders in man that I have seen were two in number, and they occurred within a week without having any connexion with one another. A surgical friend recently mentioned the fact that on the preceding evening he had treated two cases of fractured arms in children, although for a long time previously he had not had a similar case. I heard a country practitioner say that he had at the time of speaking three cases of fractured legs under his care, a thing to him unprecedented. It would be easy to multiply examples bearing on the same subject, if it were necessary, to mention occurrences which must be in the experience of every medical man. In the autumn of 1894 and in the early part of the late winter I treated only a few cases of hæmorrhage, chiefly hemoptysis in phthisical patients; but in the month of March quite suddenly a considerable number of cases of bleeding of various kinds came under my observation. These might be explained, perhaps, by atmospheric influences and were not strictly coincidences like the preceding examples, but still they were non-contagious diseases that did not come singly.

Among the cases of hæmorrhage were two or three of interest. One of them was a case of epileptiform convulsions from loss of blood. The subject of the attack was a man about forty-nine years of age who, after getting out of bed in the night to micturate, suddenly fell on the floor insensible and became immediately convulsed, especially on the left side. He gradually regained consciousness, but in less than an hour he was convulsed again. The second attack subsided in the course of a few minutes. The patient then appeared ghastly white and complained of headache, muscular twitchings of the left side of the head, and great prostration of strength. In the course of the day he was profusely purged, the stools being melænic, and this character of the evacuations continued for three or four days. The patient had suffered from painful digestion for several years, but on no previous occasion had he lost blood or been convulsed.

Another case was that of a woman fifty years of age, who consulted me on account of disagreeable sensations in the region of the bladder and scanty flow of urine. On the third day after my seeing her she commenced to void blood with her urine. This was followed by a flow of blood from the nostrils and mouth, and her loose motions also gave evidence that blood was escaping from the intestinal tract. In addition the skin presented patches of ecchymosis, especially wherever the slightest pressure had been made. For two or three days the patient's temperature was increased and her face flushed, but with these exceptions there were no indications of fever, and the only complaint she made was of headache and debility. When this patient was eighteen years of age she had a similar attack, but much milder in character, and a few years ago she had a tooth extracted which caused bleeding so profuse and so prolonged that the dentist declared he would never touch one of her teeth again.

Among the cases of hæmoptysis was an old patient who had suffered from phthisis for upwards of twenty years. One Sunday in the month of June, 1875, he was carried out of a chapel coughing up blood. The day was hot, the congregation large, and he felt oppressed; but before he could get into the fresh air the bleeding came on. He quickly recovered from this attack, but, strange to say, on the corresponding Sunday of the following year a similar occurrence took place. Since then scarcely two years pass without the patient having an attack of bleeding more or less profuse which brings him to death's door. Then when things seem to be at the worst he begins to improve, and this is his condition at the present time.

All the patients afflicted with hæmorrhage suffered from little or no pain with the exception of one or two. In a case of renal hæmorrhage the result of a calculus, the pain which a patient endured for a day or two was very great. From the effects of the hæmorrhage, however, all the patients recovered, and this was a happy consummation for patients and physician. In the case of hæmophilia ergot was of the greatest service, although the drug is not recommended in such cases by some writers.

Lincoln.

THE PORTSMOUTH INFECTIOUS HOSPITAL.—The borough auditors of Portsmouth (Mr. H. B. Morris and Mr. E. E. Hanham) issued their report on Friday, the 23rd inst., on the general municipal and urban sanitary authority's accounts and books for the past year. Every department is dealt with at length, and regarding the health department they say: "We are glad to note that our suggestions, as to the day-book being a complete register of all the patients admitted to the infectious diseases hospital and the charge made being inserted against each name, have been adopted. We note a considerable increase in the amount recovered from patients in the hospital."

THE LANCET.

LONDON: SATURDAY, AUGUST 31, 1895.

THE question of the remuneration of medical witnesses for attending and giving evidence in courts of law has always been a contentious one, and we fear there is little likelihood of establishing a scale of fees that would be acceptable to members of the profession and intending litigants. Much, however, might be done in the matter of fixing an equitable payment of fees where the courts have the authority of ordering such payment. A medical man is not bound to give evidence on matters of opinion, but he must answer his subpœna on questions of fact like any other witness. It is difficult, however, to dissociate the two cases, for it rarely happens that professional testimony is required except where inferences constitute its essential value. As regards civil actions it has been submitted—(1) that a medical witness should have an entirely free hand in coming to terms with his intended clients—that he should be unfettered by rules of practice or rules of court; (2) that he ought to be satisfied with the regulation conduct fee claimable on receiving his subpœna; and (3) that in certain cases he ought to give evidence and furnish reports *gratuitously*. The first suggestion is, in our opinion, the only tenable one: for otherwise, whilst protection and relief might be given to impecunious yet deserving persons, the door would be opened to others in a position of competence, or even affluence, who would not scruple to take advantage of regulations never intended for their benefit. In the case, say, of a poor man who had been injured, possibly through no fault of his own, it is certainly hard, when he makes a claim for compensation, that he should be unable to support such claim by medical evidence simply because he cannot afford that which some have termed a luxury, but which in reality is necessary to establish his plea. At the same time, it is idle to contend that the medical man who has treated him should be compelled to attend the court and give evidence without a guarantee of remuneration. The plaintiff, let us suppose, is wholly incapable of making good a promise of payment unless he succeeds in his action. It is clear the defendant will not be moved by a spirit of friendly feeling towards the medical attendant of his opponent, and would only pay on judgment against him. The members of our profession have equally "a tear for pity and a hand open as day for melting charity" with other sections of the community but were they on all occasions compelled to be the bright examples, we fear that at no distant date they would be the victims of misplaced confidence and over-exacting claims, for

> "Goodness growing to a plurisy
> Dies of its own too much."

At a recent trial the Common Serjeant made some strong remarks on the duties of hospital surgeons as witnesses "being of opinion that a plaintiff ought to receive a report without any fee; and for a hospital surgeon to demand one and to refuse to give evidence unless he received another fee he thought an improper proceeding." With all submission we directly challenge the contention of the learned judge. We are obviously not in a position to pose as authorities on purely legal matters, but we would suggest that "a report" for the purposes of litigation would be practically valueless. Would the Common Serjeant admit such as coming within the laws of evidence? We think not. For without supplementary personal testimony, where would be the justice to the defendant, who has the right of challenging and testing the value of such testimony by cross-examination? Moreover, on other grounds we demur to his opinion. A hospital surgeon, whether visiting or resident, in many cases serves without any remuneration whatever, and when paid receives in most instances a poor equivalent. We do not complain of this, but we certainly think that he should not be at the beck and call of every claimant patient, not only for his own sake, but even more for that of the many other sufferers under his charge, who, by his perhaps repeated and protracted absence, would not receive the attention they deserve and have a right to demand. No; if medical testimony must be forthcoming there should be some rule sanctioned by the Home Secretary or other official such as obtains in the police-courts, under which a medical man's attendance and evidence meet with some pecuniary recognition.

The existing scales of fees for travelling expenses and for the services of medical men as witnesses in the different courts require regulating with a view to fairness of payment and greater uniformity. Under existing conditions a practitioner if called to attend an Assize Court distant from home is not allowed anything for Sundays, even though it is impossible to leave the locality of the court. This is an injustice to which we have referred on many occasions. The law moves slowly in matters of reform, but we would again urge the right of our professional brethren to their undoubted dues.

IN a recent issue of the *Journal of Comparative Pathology and Therapeutics* there is an instructive paper by Professor HOBDAY, of the London Veterinary College, on the Therapeutic Uses and Toxicological Effects of Cocaine in the Horse, Dog, and Cat. He performed a considerable number of experiments on these animals with this drug, the result of which lend additional support to facts already acquired with regard to its usefulness as a local anæsthetic as well as to the danger that may attend its injudicious application. He was led to institute these experiments from an accident that happened to a dog about to be submitted to an operation, into which the student injected subcutaneously about twenty minims of cocaine in each of six or eight places, the animal—a mongrel spaniel—receiving altogether about sixteen grains of this drug. This produced frenzy, convulsions, and the other indications of cocaine poisoning, and death ensued within ten minutes.

Its therapeutic value as a local anæsthetic in superficial operations on the eyes of horses, dogs, and cats is shown by a number of cases in which foreign bodies, tumours, and the membrana nictitans were painlessly removed, as well as

eyelids sutured without any difficulty. Its anæsthetic action when applied locally to parts where the skin is tender, thin, or denuded of hair was demonstrated in various instances in which horses had the actual cautery applied for exostosis on the phalanges and other morbid conditions, as well as in division of sensory nerves of the limbs for navicular disease. In the latter cases the solution of cocaine was first injected subcutaneously, then the skin over the nerve was incised, and some of the solution (twenty minims) poured into the connective tissue directly on to the nerve itself; this when cut and a portion removed did not produce any evidence of pain. Mammary and other tumours were also removed from dogs and horses without occasioning any manifestation of uneasiness from the operation, though in some instances the constitutional effects of the drug were exhibited in a more or less marked manner. The toxic action of cocaine on horses, donkeys, dogs, and cats was distinctly shown in various operations, as well as in some experiments, death resulting in some instances after the exhibition of characteristic symptoms, which would undoubtedly interfere with the carrying out of delicate operations. Cases are detailed which would go to prove that cocaine is readily absorbed into the system from serous and mucous surfaces, and that it might be useful in allaying irritation of the stomach by its action on the nerve terminals in the lining membrane of that organ. The fact that cocaine, when brought into contact with a large nerve trunk, will cause anæsthesia of all parts supplied by that trunk below the seat of injection, can be utilised as a valuable aid to diagnosis in certain cases of obscure lameness in horses, was demonstrated in a number of cases recorded by Professor HOBDAY, in which foot lameness was proved to be present by its temporary disappearance after subcutaneous injection of the drug over the metacarpal nerves. The observation made in France that cocaine will diminish the lacteal secretion of animals when applied to the mammary glands was corroborated by the case of a bitch which, when in full milk, had the mamma painted four times daily with a solution composed of five grains of cocaine hydrochlor., one ounce of water, and half an ounce of glycerine. In three days the secretion was very perceptibly decreased, and it had almost ceased in five days.

Professor HOBDAY concludes that there is no absolutely certain antidote to cocaine, though he gives instances which show that opium and amyl nitrite have the power of antagonising the spasms, the latter drug doing this when inhaled or administered hypodermically. The drug was used in no fewer than ninty-nine cases, and the conclusions derived therefrom by Professor HOBDAY are to the following effect:—1. Its therapeutic value in certain cases is unquestionable, but its use in all animals is attended with danger unless proper care is taken to estimate the amount which can be employed with safety. 2. It can readily be absorbed from subcutaneous, serous, or mucous tissues, and is of value as a local anæsthetic in surgery and in certain affections of the stomach—though in surgery there is danger of interference with the operation if too large a dose, not necessarily toxic, be given because of the violent involuntary clonic spasms of the voluntary muscles. 3. The safe and effective subcutaneous dose for the horse is not more than ten or twelve grains, for the dog from two to four grains (by the mouth one to four grains), and for the cat and delicate breeds of dogs not more than one grain. 4. The first sign of danger is great uneasiness, followed by powerful involuntary clonic spasm of the voluntary muscles of the body, especially those of the jaws and limbs. 5. If a diseased condition of the heart or lungs, especially the latter, be suspected, great care must be observed and a minimum dose given. 6. The anæsthetic effect is only manifested locally and around the seat of inoculation from half an inch to an inch and a half, not extending to the deeper tissues, the anæsthesia occurring in from three to five minutes and continuing for about twenty to twenty-five minutes. 7. Toxic doses, subcutaneously, and allowing for idiosyncrasies, are for the dog from three to six grains, and for the cat from two to four grains. The symptoms due to a poisonous dose are enumerated and are as follows. In from two to four minutes after subcutaneous administration the animal becomes unusually quiet if undisturbed; there are constant licking of the lips, and often a smacking sound, increased flow of thin watery saliva, which collects at the back of the pharynx and dribbles from the lips, sometimes interfering with respiration and causing constant gulping and apparently a choking sensation. The animal is very sensitive to all sounds, and attentive when spoken to, and the ears are moved backwards and forwards. Uneasiness then ensues, followed in from two to twenty minutes by the violent clonic spasms already alluded to, which occur about every fifteen seconds and rapidly lead to exhaustion, as the animal appears to be quite unconscious. A curious effect of cocaine on the motor nerves was noted in dogs affected with chorea. Animals so affected, and which could not proceed five yards without staggering and falling, after receiving a dose could walk quite well and appeared bright and cheerful. This effect was very transient, however, and the after-effects were not favourable.

IN his recent Croonian Lectures Dr. MARCET touches on a subject which deserves more attention than is commonly accorded to it—viz., the training of the muscular acts involved in respiration, with the view of combating certain morbid conditions. The case to which Dr. MARCET more particularly refers is that of asthma, which he believes to be due in part at least to a deficient supply of oxygen to the respiratory centres. "Why," he asks, "should not asthma yield to the training of the respiration, carried out by practising the respiratory movements wanted to carry the tidal air through the lungs to oxidise the blood and emit the carbonic acid, while imparting to the circulation a better tendency to work in perfect harmony with the respiratory requirements?" The lecturer professes to have made practical trial of this idea in only one case, but with complete success, and the suggestion is worthy of attention. That asthma is attended by a deficiency of oxygen in the blood is probable, but it is open to question whether this is the cause or the consequence of the affection. The severity of the paroxysms and their remarked periodicity, together with the immunity of the patient in the intervals, suggest that some derangement of the nervous mechanism is at work, but it is quite conceivable that an accumulation of carbonic acid in the blood supplying the nerve centres may

play a real and large part in the determination of the symptoms of the disease. If this view be well founded, systematic physical exercise directed especially to the play of the respiratory function would offer hope of benefit in the treatment of asthmatics.

The question is, however, a much wider one. How much imperfect development and feeble vitality, how much indifferent health and minor derangement of function, how much phthisis and other pulmonary disease is due to this single cause—viz., the neglect of systematic training of the breathing—would be difficult of determination, but the amount of mischief attributable to this cause is undoubtedly large. In the education of the young this point was long wholly neglected, but, happily, a remedy was in many cases unconsciously applied. Most games practised at schools involve fairly thorough and satisfactory, though undesigned, respiratory gymnastics. Calisthenics, which now form part of the ordinary school régime, though primarily intended for the development of the muscular system generally, are also efficient for the development of respiratory power. In some schools the art of breathing is systematically taught. It is a comparatively simple matter to insist without fussiness or undue self-consciousness upon the great importance of cultivating the habit of taking regular and full respirations, more especially when in the open air, and exercising with a view to health. Such a habit has many indirect as well as direct advantages. Not only does it strengthen the respiratory mechanisms, but it helps to purify the blood, to heighten the general vitality, and to obviate the tendency to certain diseases. There can be little doubt that one of the most fruitful causes of phthisis is imperfect expansion of the lungs, leading to the accumulation of insufficiently oxygenated air, which affords a nidus favourable to the development of the bacillus of tubercle. The fact that tubercle shows such a decided preference for the apices—i.e., for the least expansile portion of the lungs—is a strong corroboration of this view. Hence, in early cases of phthisis, where there is little or no pyrexia or wasting, success in treatment often follows measures designed to promote pulmonary expansion. Regulated exercise, riding, cycling, cricket, golf, judicious mountaineering, are often of signal benefit in such cases, and it seems probable that they operate chiefly by promoting a more efficient performance of the respiratory function. No doubt we must choose our cases with caution, and the off-hand recommendation of exercise, fresh air, and change of climate to phthisical patients is most deplorable. In many cases rest and quiet are rather to be enjoined, but the distinction between the two classes of patient is not as a rule very difficult to draw. What we wish to emphasise is the view that where the absence of acute symptoms permits the treatment of phthisis by the more robust methods the importance of a systematic development of the respiratory function should never be lost sight of. In this connexion the practitioner will do well to bear in mind the value in certain cases of the cultivation of any gift for singing that the patient may happen to possess. That the cautious and judicious practice of these various forms of respiratory gymnastics tends to hæmorrhage is, we think, a mistake. No doubt, this point is worthy of the utmost care and attention, but we think experience shows that in a large proportion of cases pulmonary hæmorrhage does not follow upon exertion, and that it is comparatively somewhat frequent at night and in the early hours of the morning, when the patient has been for some time at rest. Of course, we do not for a moment question the necessity for rest when hæmorrhage either actually exists or has recently occurred.

There is another condition in which respiratory gymnastics are probably the most essential point in treatment—viz., stammering. No doubt there are various types and grades of this disagreeable infirmity, and more than one cause for it exists; but in a large proportion of cases the crucial point is the inability of the sufferer to control his respiratory function. In this case persistent and persevering training will often effect the happiest results. The patient must be taught how to breathe regularly and efficiently, and if this can be effected his defects of vocalisation and articulation will often be easily overcome. It is a great point gained when he comes to realise clearly that his malady is not a mysterious and hopeless affection, but, to a large extent at least, simply an inability to control the breathing. The neglect of the whole subject of systematised breathing is probably owing to the feeling that it is too obvious a matter to require any instruction. Many take it too much for granted that breathing is an instinctive act which requires no training for its efficient performance. We hope we have said enough to show that this view of the subject is a mistaken one.

Annotations.

"Ne quid nimis."

THE DANGER OF TINNED FOODS.

IT is admittedly difficult to reach the "masses," but we think it is the duty of every conceivable agency—the press, "those who know," and even the pulpit—to warn the people of the grave danger of eating tinned foods that have been exposed to the air some time after opening. We should have thought that the cases of wholesale poisoning that have been reported in the newspapers from time to time would have sufficiently placed the public on their guard in this matter; another case, however, comes from Wakefield, in Yorkshire. It appears that a Mrs. Firth bought a tin of salmon which she kept in the house for a few days and then opened. Now she might have kept it unopened for a few months or even much longer without any reason to suppose that it would have been unwholesome so long as the contents of the tin were sound and the ends concave, but the tinned fish was exposed to the air and warmth some time, with the result that when her husband ate a portion for tea he was seized not long afterwards with violent and well-nigh intolerable pains in the back, which culminated in "a night of great agony." A little girl who had partaken of the same tinned fish complained also of sickness, gastric pain, and diarrhœa. Happily there is hope of recovery for both, though, as in most cases of acute poisoning, the progress towards this end must be slow. While the exact manner in which poisonous substances—ptomaines—are produced so rapidly is not known with certitude, the fact that they are produced in sufficient quantity to cause very grave symptoms of poisoning has been brought out in a multitude of cases. It is of the utmost importance to observe, however, that in these instances where such things as meat, fish,

pâtés, &c. were consumed when fresh each and all proved perfectly wholesome; but the very same viands when eaten one day or a few days later occasioned the most severe sickness. In one well-known case in particular the first half of the contents of a tin of lobster was consumed with no ill effect, but the rest a few days afterwards proved extremely poisonous. We have not one word to say against the use of tinned provisions so long as they are turned out of the tin in good condition. There is, indeed, no ground for doubting their wholesomeness, and in many instances they supply a real need; but consumers of these preserved viands, who, we think, belong mostly to the poorer classes, must be warned of the very real danger which may result from eating them after a day or longer of exposure to the air. As a safeguard, and without injuring their interests, could not the manufacturers of these commodities be induced to label the tins to some such effect as follows?—"The contents of this tin are perfectly wholesome when eaten fresh from the tin and afford good food, but the public are advised not to expose the contents for any length of time to the injurious influences of the atmosphere." It is simply a question of degree. Fresh butcher's meat is wholesome food enough, but there is the same risk attached to eating it if it exhibits signs of putrescence as there is in the case of tinned foods. Either will "turn" after a few days' exposure to the air. We go further, and venture to suggest that some such warning placed upon the label might be insisted upon by the Legislature.

THE HEAT AND THE LATE MILITARY MARCH.

THE number of soldiers who fell out during the late march from Aldershot to the New Forest has been productive of a good deal of attention and comment. There is no doubt that a considerable amount of temporary inefficiency was caused by the heat and fatigue—especially among the young soldiers—on this as on some previous occasions. The heat, which occurred suddenly and lasted only for a short time, was by all accounts exceptionally great, and young soldiers of the British Army bear heat badly until they have undergone some training and become accustomed to it and to the carrying of their arms and equipment in the course of marching. Some of the most remarkable marches on record have been made, however, by the British Army, but the soldiers have been in excellent training at the time and usually mature and well developed. As far as we can learn, the military authorities exercised all practicable care and consideration. On occasions of this kind it is to be remembered that there is commonly some leave-taking and jollification beforehand, and the men do not always start on a march in the best condition possible. Temperance in all things, bathing and cleanliness, light porous clothing, and very open order in marching—the marches being undertaken early in the morning or in the evening when there is moonlight—with halts *en route*, are the best and most common-sense safeguards against the effects of heat. But young and immature soldiers—mere lads—always bear heat, fatigue, and weight-carrying badly, notwithstanding their remarkable recuperative powers.

THE EMOLUMENTS OF AN EXECUTIONER.

M. DEIBLER'S name having been a good deal before the Parisian public lately in connexion with a case which he lost in the law courts, advantage has been taken of the circumstance by the crotcheteers, who are ever ready to seize upon any excuse, however flimsy, in order to call attention to their pet conceits. The partisans of "economy at all costs," for instance, maintain that the gruesome official's emoluments are far too high, and demand a reduction of at least one-half; while the opponents of capital punishment would carry out a still more fundamental retrenchment by abolishing the post altogether. "Without seeking to advocate or contest the opinions of one side rather than the other," says *Le Progrès Médical*, to whom we are indebted for the above information, "it seems to us that the subjoined record extracted from the archives of old Paris possesses sufficient interest to warrant its publication. Our readers will see from it what a terrible thing the capital penalty was in former days and at the same time learn that the gentlemen who acted as executioners, with their assistants and torturers, did not labour for glory alone."

An Executioner's Price List.

	Livres.
To boiling a malefactor in oil	48
,, quartering him while alive	30
,, affording a criminal passage from life to death by the sword...	20
,, breaking the body on the wheel	10
,, fixing his head upon a pole	10
,, cutting a man into four pieces	36
,, hanging a culprit	20
,, enshrouding the corpse	2
,, impaling a living man	24
,, burning a sorceress alive	28
,, flaying a living man	28
,, drowning a child-murderess in a sack ...	24
,, burying a suicide at cross-roads	20
,, applying the torture	4
,, applying the thumb-screw	2
,, applying the buskins...	4
,, administering the Gehenna question ...	10
,, putting a person in the pillory	2
,, flogging	4
,, branding with a hot iron	10
,, cutting off the nose, the ears, or the tongue	10

DEATH UNDER CHLOROFORM.

A CASE of more than usual interest is reported by the *Bombay Gazette*. A male native aged fifty, a Mahomedan, was placed under chloroform by a native lady student and died. The man, Emanbhoy Dadabhoy by name, had been admitted in the Sir Jamsetjee Jeejeebhoy Hospital suffering from disease of his upper jaw-bone. The operator was Mr. Masini, L.R.C.P. and S. Edin., the chloroformist was Miss Dadabhoy, senior student of the Grant Medical College, and the administration was supervised by Mr. B. N. Anklesaria, a graduate of the Bombay University (B.Sc. and L.M. and S.). Surgeon-Major Hatch, the senior surgeon to the hospital, superintended the proceedings, and stated in his evidence that at 8.45 A.M. he directed Miss Dadabhoy to give the chloroform, requesting Mr. Anklesaria to superintend. Chloroform was given from a linen cap, one drachm being administered at a time. One dose was inhaled for five minutes, when another drachm was poured into the cap. A third drachm was subsequently given, and after this the patient showed signs of going "over." The patient had not up to this point breathed well, so the cap was removed and held some distance from the patient's face by Mr. Anklesaria's direction. When the patient was "fairly under"—i. e., after the third drachm—he was conveyed to the operating-theatre for Mr. Masina to make an examination previously to the adoption of operative measures. Surgeon-Major Hatch then left the theatre. The chloroform was continued until six drachms had been inhaled, when, the patient being pronounced "over," the examination by introducing a director and the finger into the nostril was commenced. At the end of the examination the patient was found not to be breathing well. The chloroform was discontinued and artificial respiration commenced. All natural breathing ceased in a few seconds. Upon Surgeon-Major Hatch being fetched he found air was not entering the lungs in spite of artificial

respiration and therefore performed tracheotomy; artificial respiration was then continued for an hour. All efforts at resuscitation, however, proved futile. The lungs and heart were found to be free from disease, and Surgeon-Major Hatch expressly stated that those concerned in giving the anæsthetic were competent and had had some experience. This is one of the few deaths which have been reported from India, and unless the evidence upon which we base our report is inexact it would appear that possibly the fatality was due to an overdose of chloroform poisoning the respiratory centre. The statement made is that the death was due to failure of respiration. It may be presumed that had the impairment of respiration referred to above arisen from a hæmorrhage started by the examination of the nose or by a fragment of growth detached and fallen back upon the rima glottidis some mention would have been made of it by Surgeon-Major Hatch in his evidence. The point which is not clear is what was the interference with breathing noted as occurring almost from the commencement of the inhalation and from what cause did it arise? The culminating point seems to have been the examination of the nose, which must have caused bleeding. During the performance of artificial respiration the air did not enter the lungs. Here, again, we are left in the dark as to why any obstruction existed if the death was due simply to poisoning of the medullary centres. It would appear more in harmony with the theory that some foreign body—blood-clot—or growth had, during the digital examination of the nose, become detached and had dropped into the trachea. The method of administration appears to have been the one common in India, in which measured quantities of chloroform are poured into a linen mask or cap held over the patient's face, and the respiration is relied upon entirely for guidance as to the condition of the patient and the degree of chloroformisation. As we have said above, we can only rely upon our contemporary for the facts of the case, but trust we may receive an authoritative notice of the occurrence, and, if need be, an emendation of our account.

MADAGASCAR.

IN our notices regarding the French military expedition in Madagascar we have endeavoured to avoid all sensational statements, in view of not increasing the foreboding and depression which have generally characterised the articles that have appeared in the French press. An expeditionary force operating in a malarious climate like Madagascar is sure to have a large amount of inefficiency from sickness. That is only to be expected, and under certain conditions of season and service it may even reach a disastrous figure. This country has altogether had a pretty considerable experience of expeditions in hot and malarious climates. The amount of sickness must always be to a great extent an unknown quantity, but it will nevertheless greatly depend upon the season at which such expeditions are undertaken, the provision that is made for them, and the promptitude and efficiency with which all field arrangements—especially those of transport and commissariat—are carried out. The Ashanti War, in a most malarious and deadly climate, was a very successful expedition, because the right season was chosen and everything had, as far as possible, been provided for the troops, which care and forethought could suggest. Our first occupation of Cyprus, on the other hand, was attended with a very large amount of sickness and much mortality, because the force was sent off in a hurry at the wrong season, and, as it proved, during an exceptionally unhealthy year, without adequate provision for safeguarding their health. There was no fighting, and Cyprus has since proved a very healthy climate for troops occupying suitably selected sanitary positions. We are afraid that the last news from Madagascar must have the effect of increasing the forebodings and expressions of disappointment on the part of the French press and of embarrassing the French Government. There are said to be 5000 men of the French force sick in the various military hospitals and in the sanatorium at Nossi Komba, and the mortality since the arrival of the troops in Madagascar is said to have been very considerable. According to an account published in the *Gaulois*, "the number of dead will never be known in France." In addition to climatic fevers there has been a good deal of diarrhœa and dysentery of a malarious type. It must be remembered that exposure to freshly turned up soil is a fertile source of malarious fever, and many of the French troops have been engaged in road making. There does not seem to be any doubt that the Madagascar expedition has, moreover, been sadly mismanaged in some important particulars. We can only repeat what we have already pointed out—viz., that it is of the greatest importance to the health of the soldiers and the success of the expedition that the force should reach Antananarivo before October, when the rains set in. If the French do not succeed in doing this there is sure to be an increased amount of sickness, and the cost of the expedition, already great, will be largely augmented.

ANOMALOUS CASES OF FRIEDREICH'S ATAXY.

IN a recent number of the *Dublin Journal of Medical Science* Mr. M. J. Nolan has described three cases of this disease which present some variations from the ordinary type, especially in the association of idiocy with the physical signs of the disease. The patients are members of the same family. The parents are living, the father being, it is said, a habitual drunkard and the mother a healthy woman. There is no strong morbid taint evident in the family history. In the particular family with which we are concerned there have been eight children. Of these, the first, second, and seventh are intelligent and healthy, the fourth and sixth are dead, while the third, fifth and eighth are ataxic and idiotic. All were reared at the breast for an average period of one year and nine months. In each of the three cases of disease the signs were noticed by the mother soon after the birth of the children, and became more obvious with increasing age. The first case was that of a woman aged twenty-two who was admitted to the Down Asylum as a "dangerous idiot," she having, it was asserted, assaulted her brother. She had much difficulty in standing and walking, nystagmus was present without pupillary change, the knee-jerks were absent, and there seemed to be scattered anæsthetic patches on the skin. The breasts and genitalia were undeveloped, and there was marked interference with articulation associated with twitchings about the mouth. Athetotic movements of the arms were also present. There was no interference with the visceral functions, and no loss of control over the sphincters. There was a lateral curvature. The second case was similar in most respects, only the knee-jerks were present and exaggerated, and there was unusual development of the external genitalia. He also had the reputation of being a "dangerous idiot." The third patient was only ten years of age, and his symptoms were precisely similar. His knee-jerks were absent. These cases illustrate in most of the important symptoms the disease associated with the name of Friedreich, and even in themselves they illustrate the variability in minute points in the symptoms and signs of the disease. The important sign of the knee-jerk even varies, being present and active in one case, but absent in the two others. All of them show a peculiar mental imbecility, no doubt associated with some interference with the development of the brain, just as the physical symptoms are associated with mal-development

of the spinal cord. These cases also illustrate the varying incidence of the sclerosis in different parts of the spinal cord. In the two cases in which the knee-jerk is absent we must assume that the posterior columns are most affected, while in the other the lateral columns must be the parts most sclerosed. In a disease like Friedreich's, in which the sclerosis is usually widespread and found to affect many tracts, it is quite conceivable that such sclerosis will sometimes be greatest in the posterior columns, and sometimes greatest in the lateral, and the symptoms, more particularly the knee-jerk, will vary accordingly. The cases constitute an interesting and important addition to our knowledge of Friedreich's disease.

CATTLE DISEASES AND HUMAN HEALTH.

ALTHOUGH no very definite information was given to Admiral Field by the President of the Local Government Board in answer to his question in the House of Commons concerning the steps to be adopted so as to prevent injury to human health owing to the use of milk imported from countries where cattle disease was prevalent, yet it is a satisfaction to learn from Mr. Chaplin that he is already interesting himself in this important subject. Admiral Field's question was perhaps somewhat imperfectly worded, for it mixed up points as to milk in relation to human health—which obviously concern the Local Government Board—with others as to pleuro-pneumonia and foot-and-mouth disease, which, being diseases scheduled under the Animals' Diseases Act, concern the President of the Board of Agriculture. Indeed, the use of the milk of animals so suffering is already prohibited under an Order made by virtue of that Act; and the extent to which those diseases prevail in foreign dairies is a matter for the Agricultural Department. The question was also a little confusing in its comprehensiveness, for it dealt with all manner of infectious diseases; whereas when the Government come to deal with the subject—as, for example, on the report of the Royal Commission on Tuberculosis—the matter will necessarily have to be considered, first, as one of the spread of a bovine disease from animal to animal, and, secondly, in connexion with disease which is communicable to man by reason of food-supplies. It is this latter point, we assume, that Mr. Chaplin will take up, and to which he refers as already occupying his attention.

THE DIFFUSION OF SMALL-POX.

THERE are evidences in the records for the metropolis during last week that small-pox is not showing much disposition to decrease in London. The cases freshly coming to light in the week numbered 26, the bulk of them being ocated in sanitary areas closely bordering the River Thames both on its northern and southern banks, the north and west of London being remarkably free from the disease which clings to a well-defined group of areas in eastern London. As an example, we may state that on Tuesday of last week of the 15 cases admitted to the hospital ships all were from eastern districts. There is matter for congratulation in knowing that nearly all, if indeed not all, the attacks are promptly isolated in the ships, thus saving the metropolis from the added danger of foci of disease being maintained in populous centres. But such action is not all that is needed, for, added to this prompt removal of patients wherever possible, there should be equally prompt recourse to vaccination or revaccination of all inmates of invaded houses when these operations have not been recently or efficiently performed. Indeed, it is not too much to say that the success of the action of the health authorities to cope with small-pox must be in great measure dependent on the facilities offered to the public for securing themselves against the danger of contracting small-pox by means of exposure to the infection in houses actually invaded by the disease. It is satisfactory in this connexion to read the report which Dr. Loane has presented to the Whitechapel board of works on the measures which have been and are in operation in the district and union for securing that all the necessary measures of disinfection of premises, and of vaccination and revaccination of all persons in anywise exposed to infection, are quickly and generally carried out, thus limiting as far as can be done the chance of spread of the disease through the medium of shelters, lodging-houses, and private dwellings. Last week there were as many as six registered deaths in London in almost as many different sanitary districts, three in unvaccinated young persons and the same number in vaccinated adults. There were some 350 patients suffering from small-pox under isolation last Saturday, against 200 at the end of July. A few attacks are reported from suburban districts, but England in its southern, western, and midland counties seems free from the disease. The medical officer of West Bromwich has written to the local press contradicting the statement as to the occurrence there of several cases of small-pox last week, the borough being quite free from the disease. There is still some small amount in Lancashire towns, last week witnessing the the registration of 2 deaths in the borough of Oldham, although the cases were not in excess of that number; and Manchester again had some attacks, 3 in number, as against 6 in the Openshaw division in the preceding week. Salford had to record a single case only. In Dublin in the week ending Aug. 17th there were 3 admissions of small-pox patients to hospital, and the 1 registered death from the disease was in the person of an unvaccinated child aged under five years. The discharges numbered 4, and there were left 25 acute and 3 convalescent cases in hospital.

HOTEL SNOBBERY.

THE use of a uniform, notwithstanding certain obvious advantages conferred by it, is occasionally found by its wearer to be somewhat inconvenient. This would not be remarkable if the dress itself were designed in striking contrast with public taste or good feeling. Neither should it surprise us that the misconduct of individuals can and does bring discredit upon their cloth and all else connected with them. When, on the other hand, no ground of offence exists either in the persons or their clothes it were folly to raise objections against either. Yet this is done, and more, since instances might be cited in which, although the outward aspect has been entirely becoming and the conduct above reproach, still the sentence in some corners of society has been one of ostracism. We may quote an example of this kind which was recently noticed in the daily press. A hospital nurse, having gone to visit her father at a hotel in the West-end of London, appeared in the breakfast-room in uniform. She was there informed that she could not be admitted as a guest, as her dress was objected to. Why, we are unable to say, and we are equally at a loss to discover any reasonable excuse for a prohibition so inhospitable and so near of kin to insolence. Was the garb too plain, too work-a-day, and, if so, wherein was it a whit less neat or less reputable than that of a deaconess or a sister of mercy, or for that matter of a great many ladies not clad in uniform? Are we to suppose that the hospitality of this hotel is denied on principle to every form of dress below a certain expensive standard of quality? Perhaps, however, the nurse's costume is considered to be suggestive of morbid associations, of contagia, and the like. If this be the case, we can reassure a diffident manager and the over-nervous occupants of his establishment. No body of persons in the kingdom understand and obey more fully than do professional nurses the requirements of sanitation in regard to such matters. We hope, therefore, that neither

the pretensions of snobbish custom nor a somewhat cowardly excess of zeal for sanitation will long be suffered to curtail the just privileges of a class whose existence among us is as great a credit as a boon to society.

ST. BARTHOLOMEW'S HOSPITAL.

SOME years ago the number of surgeons at this hospital was increased from four to five, and a similar step having now been taken with regard to the physicians the newly created post was filled on Aug. 22nd by the election thereto of Dr. Lauder Brunton. This election affords a noteworthy instance of the slowness of promotion at some hospitals. Dr. Brunton has, indeed, had a long wait. He has been seeing out-patients at St. Bartholomew's Hospital for nearly a quarter of a century—i.e., for some four years as casualty physician and for twenty-one years as assistant physician. Dr. Brunton even now may in some respects be considered as fortunate to obtain the full physiciancy, for had no fifth appointment been created he would have had to wait for eight years longer, and had not a vacancy occurred owing to Dr. Southey's resignation some years ago he might never have been physician at all or have only held the post for one or two years, the age limit being sixty-four. It is quite unnecessary to dilate here on the good work which Dr. Brunton has done, since the profession is well acquainted with it, but we may congratulate both St. Bartholomew's Hospital and Dr. Brunton himself on the extended sphere of influence which is now open to him.

CREMATION IN PARIS.

THE number of incinerations called for by the representatives of deceased persons increases every year with great regularity, but the increment is so small that the partisans of cremation are well-nigh reduced to despair. According to some statistics published by the Prefect of Police the number of cremations carried out at the Père-Lachaise Cemetery from August, 1889, to the end of April, 1895, was as follows: 1889, 49; 1890, 121; 1891, 134; 1892, 159; 1893, 189; 1894, 216; and 1895 (four months), 75. The furnace would consequently often be idle were it not for the remains from the hospitals, which amount to from 2000 to 2500 bodies per annum. The apparatus employed is that of MM. Toisoul and Fradet, and works by means of gas with a recuperator. Incinerations are accomplished in an hour, or at most an hour and a quarter, and the cost of the combustible never exceeds 3 fr. per operation. Another apparatus, invented by M. Fichet, has recently been inaugurated. Like the first, it consists of a gazogene furnishing oxide of carbon and a recuperator supplying hot air to the vaulted chamber in which the reduction to ashes takes place. The difference between the two appliances lies chiefly in the application of the oxide, which is used solely for heating the recuperator, the combustion of the body being effected by hot air alone, thanks to the augmented efficiency thus obtained. According to this method incineration takes place a little more rapidly than in the Toisoul furnace, but the expense is greater by nearly a quarter, 18 hectolitres of coke being required instead of 14.

THE ETIOLOGY OF PNEUMONIA.

AN esteemed correspondent, who has, he tells us, been in practice for upwards of fifty years, thinks that the key to pneumonia, bronchitis, and other internal inflammations is not to be found in the infection by specific germs, but rather in autogenetic poisoning. He points out, for example, that pneumonia is often secondary to the specific fevers, and that bronchitis may be one of the earliest manifestations of such a fever. But apparently he thinks a greater share in the production of these inflammatory disorders is taken by depraved blood states due to defective digestion or metabolism, and affirms that the onset of pneumonia is paralleled by the equally sudden and familiar attack of arthritis characteristic of acute gout. In other words, he adopts a humoralistic pathology in contradistinction to prevalent bacteriological doctrines. In this respect he would find himself in line with those advocates of uric acid retention as the efficient cause of a vast number of internal diseases. Nor would we deny that there is much to be said in favour of such ideas, which go far towards explaining the occurrence of secondary pneumonia, pericarditis and the like. On the other hand the adoption of the belief in the necessity of external infection would relegate all these blood states to the region of secondary rather than essential causes. It is not difficult to conceive that, given certain states of nutrition or rather denutrition, the tissues are rendered more prone to attack by specific agencies such as the pneumococcus.

THE INTERNATIONAL CONGRESS OF OTOLOGY.

THE fifth of these gatherings will be held in Florence from the 23rd to the 28th of next month, under the presidency of Professor Grazzi. We have already published the subjects which have been selected for general discussion, to be introduced by Dr. Barr (Glagow), Dr. Gellé (Paris), Professor Gradenigo (Turin), Professor Politzer (Vienna), and Dr. Secchi (Bologna). The complete programme has just been issued containing the titles of fifty-nine original communications. The social aspect of the meeting has already been well provided for by private and public banquets, a concert at the Artists' Club, a reception within the classic walls of the Palazzo Vecchio, and an excursion to Fiesole. The comfort of visitors has been further assured by arranging with several of the leading hotels for bedroom service, lights, attendance, and morning coffee for the very reasonable price of from 3 fr. to 5 fr. All the Italian railway companies have granted reductions of from 30 to 50 per cent. to those attending the meeting, available from Sept. 12th to Oct. 8th. The arrangements in connexion with the various routes and fares made by Messrs. Cook and Son will be found in another column of our present issue. The Congress promises from every point of view to be a most interesting success, and will afford to its members a pleasant opportunity of seeing the Tuscan capital under most favourable circumstances. It is hoped that British otology will be well represented, as it has been decided to invite the sixth Congress to meet in London either in 1898 or 1899. The subscription is 20 francs (16s.), and entitles the *Congressista* to a copy of the printed transactions. This can be paid to Dr. St. Clair Thomson, 28, Queen Anne-street, W., from whom vouchers and all particulars as to routes, hotels, &c., can be obtained.

IS HELION IN THE AIR?

IT would appear that helion—that element supposed hitherto to exist only in the sun—has been found in the air. If this be so, then the theory that it has been found on earth only in certain minerals because these have locked it up and brought it to earth from the sun's atmosphere must soon totter. Associated in small quantities with argon, which in turn occurred with its apparently inseparable companion nitrogen, helion has been found issuing as a "stream into the air" in the gases of the springs of Wildbad in the Black Forest. Hence, concludes Professor H. Kayser of Bonn, to whom the discovery is due, free helion must be found in the air along with argon. We do not quite follow this line of argument, however, since many parts of the world, amongst which our own country may be reckoned, are not favoured with fissures

in the earth or with springs which are constantly pouring a stream of "argoniferous" gas into the air. The spectroscopic lines, he adds, are certainly very faint, but distinct enough for him to consider the presence of helion in the air of Bonn as being beyond any doubt. We believe, on the information of Professor Ramsay himself, who discovered helion, that the most searching attempts to demonstrate the existence of helion as a normal constituent of the air, or at any rate that sweeping across the British Isles, failed entirely, so that if it is about to be shown on the lines recently announced by Professor Kayser that the atmosphere is here with and there without a constituent we may hope possibly for some explanation of the beneficial effect derived from "a change of air." The observation may possibly throw some light, too, upon the value of "taking the waters," since obviously where springs abound, and especially effervescing springs, there is a greater chance of helion, as well as argon, being present. In the face of these developments we are constrained to repeat what we said in a leading article on argon and helion in THE LANCET of May 25th, 1895, that the real importance of the joint discovery of Lord Rayleigh and Professor Ramsay is yet to be estimated.

THE GRIEVANCES OF THE TELEGRAPH SERVICE CLERKS.

A COMMITTEE of inquiry which is now sitting to investigate the grievances of the telegraph service clerks has recently received evidence intended to show that the monotonous and exacting nature of telegraph instrumental work has a seriously damaging effect upon the health of the persons engaged in carrying it on. We have ourselves remarked in former times upon the trying character of such work when performed under the conditions of continuous pressure and prolonged hours, and we should have been fully prepared to find that the conclusions to which theoretical considerations point would be supported by statistics drawn from the experience of the department in dealing with the very large staff employed about its work; but for some reason which we do not understand the statistical evidence does not seem to have been forthcoming. It appears that some years ago the causes of retirement from active service and of death were given with some exactitude in an annual return to Parliament, and that the evidence thus afforded of excessive nervous strain was such as to call for special comment at the time. If it be a fact that the publication of these details was discontinued because of those comments then we think that such conduct on the part of the authorities cannot be too strongly reprobated; but, although a charge of that sort is distinctly hinted at, it is not in any sense proved, and it is therefore proper that we should refrain at present from doing more than to draw attention to the suggestion made, and add a suggestion that it might be wise and even proper in future returns to give the fullest possible information concerning the maladies from which members of the telegraph service are shown to suffer. For want of better material the spokesman on this subject of the telegraphists quoted some statistics drawn from the last published report of the United Kingdom Postal and Telegraph Service Benevolent Society. If these figures could be relied upon they would make a very strong case, but we fear that they cannot be accepted with any confidence. According to our information the Benevolent Society receives all comers without discrimination provided they be members of the service which is to be benefited by the society's operations. Now, if that be so, its membership is, of course, much more attractive to damaged than to sound lives, and the society will, therefore, suffer from an adverse selection of risks, and its experience cannot be expected to be typical of that of the service at large. If these are the best available figures the fact is much to be regretted, for best or worst they are really *nihil ad rem*. But it would seem, from some suggestions made by Mr. Spencer Walpole, that better statistics are accessible. If so, we hope that they will be laid before the committee, for the point is one of vital importance to a large and meritorious body of public servants and of no small interest from the medical point of view.

DIPHTHERIA IN LONDON.

HIGH as was the average of the weekly number of deaths registered in London in the four weeks of the present month, ended last Saturday—namely, 46—it has been exceeded in all but one, the respective registrations of fatal cases having been 57, or 23 above the corrected decennial average for the corresponding week; 55, or 23 above the corrected average; 50, or 19 above that average; and last week only 24, or 7 below the average. Thus, although last week witnessed a fall as compared with those preceding, there is no cause for congratulation in this constant overtopping of averages. Allocating the deaths in the four weeks in question to the sanitary areas furnishing multiple fatal cases, the Registrar-General states that in one of the weeks there were 4 each in Chelsea, Paddington, and Mile End, and 6 in Camberwell; in a fortnight 7 each in Bethnal-green and St. Pancras, and 8 in Kensington; and in three weeks 15 in Poplar; Islington figuring in all four weeks with a total of 16 deaths. As regards the number of cases, the records show that in the four weeks just named the cases coming to light were upwards of 800 in total against a total of over 1000 for the like period immediately precedent. But the records show with reference to cases no sufficient warrant for regarding the disease to be much on the wane at present if we have regard to individual recent weeks, last week among them. Taking these four-weekly totals of attacks and the totals of deaths for like periods, it is seen that whereas in the earlier of the two the per case mortality was 17 per cent., in the latter period it was 23 per cent. In Greater London, in the last four weeks, the deaths from diphtheria have been respectively 11, 7, 19, and 5, and of this total of 42 no fewer than 19 are credited to the West Ham district. Last Saturday the patients remaining under treatment in hospital in London numbered 666, having been upwards of 600 in number for many weeks, and having been 681, 686, 689, and 657 in the four weeks immediately preceding.

HONORARY HOSPITAL APPOINTMENTS.

LAST week the appointment of an honorary medical officer to the Royal Albert Edward Infirmary, Wigan, once more showed the humiliating, and we might say the degrading, resources which medical men are subject to for the sake of obtaining an appointment which is unpaid. Almost before the late medical officer was carried to his last resting-place canvassing was commenced, and has been prosecuted with great energy during the last six weeks. We believe that only two out of the six candidates failed to personally canvass. We are pleased to say that one of these gentlemen for his courage came in a good second in the race though he did not quite win. The voting was by ballot and after the manner of a Parliamentary election, the Mayor acting as returning officer; circulars and cards were freely sent, and as many proxies as possible were obtained. At the meeting which was held for the purpose the chairman of the board of management mentioned that it had been suggested that this mode of election should be done away with, and that instead an election committee should be formed consisting of the members of the board of management (which has four members of the medical board in its composition) and a given number of representatives of the donors and governors elected at the annual

meeting for the purpose; this plan did not meet with the approval of those present. They think, it would appear, that if the mode of election were altered they would be deprived of something which they possess. The representatives of works appear to value the privilege of voting; so much so, that one gentleman gave his proxy for one candidate and then voted for another by ballot. The hospital authorities think that an election like this does them good, reminding subscribers to pay up their subscriptions, and that it also increases the number of subscribers. They might, however, remove a portion of the degradation by making a personal canvass a disqualification.

A SUSPECTED CASE OF CHOLERA.

A CASE exhibiting at first sight some suspicious features has occurred in Wandsworth. The patient was a man named Hancock employed in collecting waste fat &c. On the morning of the 24th he was taken ill with acute diarrhœa and abdominal pain. For some three days previously he had complained of slight diarrhœa, but had continued at his work until Friday, the 23rd. Vomiting commenced on Saturday evening. On Sunday, the 25th, he was worse, and a medical man was called in. The stools were copious, watery, with a few flocculi, but bile-stained. The vomiting was constant, and in the evening he was said to have passed a little urine. The symptoms continued on Monday, with the addition of cramps, and at 7 P.M. a catheter was passed but no urine was found. He died between 9 and 10 P.M. Post mortem nothing definite was found except some slight congestion of the lower part of the ileum and the ascending colon. There was no evidence of obstruction or strangulation. In view of the symptoms during life, portions of the bowels were sent to Dr. Klein for bacteriological examination. As the result of his investigation it has been decided that the case was not one of the true or Asiatic disease. It was probably one of acute diarrhœa, brought on by the unsavoury nature of the patient's occupation.

THE Students' Number of THE LANCET will be published on Sept. 7th, and will be found to comprise every information for those intending to enter the medical profession.

DR. ALBERT GUNTHER, F.R.S., the keeper of Zoology at the Natural History Museum at South Kensington, has resigned his post after having held it for over thirty years.

MR. R. B. FINLAY, Q.C., the newly appointed Solicitor-General, was originally educated as a medical man, and obtained the degree of M.D. Edin.

MEDICINE IN THE SPANISH PROVINCES.

(FROM A CORRESPONDENT.)

AFTER several years' residence in Spain it has occurred to me that English medical practitioners might feel some interest in comparing the present state of their profession in that country with that depicted by the incomparable Gil Blas when he described his stay with Dr. Sangrado. It might cause them to be surprised—nay, incredulous—were they told that one at least of that worthy physician's great remedies—bleeding—is still in vogue among a few of the older school, with whom even the pungent satire in that work of disputed parentage has proved ineffectual. The capitals and larger towns of Europe are fast assuming such a cosmopolitan character that they cease to represent the average advance of any one nation in the march of civilisation, but give one rather the result of a few isolated and more or less successful attempts in that direction. For the purpose, therefore, of this article I have eliminated Madrid and the larger towns of Spain, though at some future time I may perhaps have some words to say about the capital and its magnificent water-supply. In the smaller towns, however, one sees the "medico" as he is—that is, the average practitioner, the rank and file of the profession—some content to do their work in a perfunctory sort of way, others wearing out their energies in an attempted struggle against the mass of ignorance and prejudice that everywhere surrounds them. The system that prevails in Spanish provincial practice is the *iguala*. This is, for all intents and purposes, the same as the club system. Most inhabitants of a town or village pay a yearly subscription for themselves and for each member of their family, entitling them during that period to free medical attendance. Midwifery, surgery, and night cases are alone excepted. Though this has the advantage of enabling a practitioner to gauge his income fairly accurately, it has the disadvantage of placing him at the mercy of cabals. Intellectually the "medico" is the leader of his little world. Should there, however, be any member of the legal profession in the village he would divide the honours with him. The *cura* (priest) may or may not arrive at his intellectual level, whilst the same may be said of the schoolmaster, who is considered a person of such small consequence that they often neglect to pay his salary for periods ranging from six months to three years. As a natural result he has to live on credit during that time, but as protracted credit is often little better than begging on one side and alms on the other this much ill-used class finds it hard to retain its self-respect and authority. So much for intellect.

We now come to the *caciqués*, who really are the influential class. These are the moneyed and landed individuals, employing a great deal of labour and often, unfortunately, increasing their wealth and power by resorting to usury. Being, however, for the most part men of but slight attainments, it is scarcely to be wondered at that they should strive hard to make use of the intellect around them to their own particular advancement. With the advent of the elections a medical man's troubles begin. At the commencement of his hospital walking he may have taken a languid interest in politics, or if of an enthusiastic and restless disposition may have had temporary leanings towards Republican ideals. Once in possession of his practice his political tendencies will have grown cold and he probably looks on polemics and parties with that supreme indifference and superior contempt which most educated Spaniards feel in their hearts.

It may seem a sweeping statement to make and one that will surprise Englishmen, but few intelligent Spaniards have any political faith. Most make use of a party, but centuries of bad government have destroyed all hope of its doing anything really useful. There is a legend which the Spaniards tell that the Virgin Mary asked her Son for various favours for Spain, such as sunny skies and a beautiful climate, and that then she asked as a last favour for good government, but that this was not granted on the grounds that such a measure would convert Spain into Paradise. With no definite political tendencies, therefore, it becomes evident that interest remains the only factor in the selection of a party, and most "medicos" adopt this plan and join the forces of the strongest *caciqué*, who, in his turn, uses his influence in favour of the candidate or the party that he thinks will be of the greatest assistance to himself. However, the followers of the opposite party in the village will never forgive the medical man for not joining their own ranks, and if strong enough will send for another practitioner, to whom they will in due course pay their *iguala*. Through these causes I have known three medical men established in a small town on terms of the most cordial enmity where one practitioner would have sufficed. Abstention from voting does not benefit him, as all parties would have a grievance, and their defection would leave him without a patient and, what is worse, without his fee. However, this is not a political article, and I will now proceed to consider the position of a Spanish provincial medical man in its other aspects. Socially considered, it might well admit of improvement. The absence of that class of small landed proprietors who live mostly on their estates and the concentration of the land into immense properties in the hands of a few wealthy owners, with whom absenteeism is the rule, only varied by

flying visits every year or two, are amongst the chief reasons accountable for the slow progress of civilisation in the provinces of Spain. A notable exception, however, may be found in some of the northern provinces, such as Galicia, where the more equable distribution of land tends to produce not only greater personal freedom, coupled with more satisfactory social intercourse, but also a much higher intellectual average. It therefore follows that in most of the provinces the medical man has to fall back upon one or two equals in education in the villages and perhaps half a dozen to ten in the more important townships, and of these probably half are, through no desire of his own, political adversaries and therefore just barely civil. It is hardly to be wondered at, then, if in the course of years he drifts down to the intellectual level of his patients, loses the enthusiasm of early days, gradually forgets what he knew, and gets completely behind the age.

In my introductory remarks I have referred to bleeding as being still practised in Spain. It is only fair, however, to say that the present generation of medical men there are in every way equal to the average practitioners of other countries and have set their faces against this practice, which, by some of the older men, is still considered the panacea for all the ills that flesh is heir to. I have known a patient insist on being bled by his medical attendant, who, however, only complied under protest and in the conviction that a little judicious blood-letting by himself would be preferable to handing his patient over to the village barber, whose discretion in the matter might not be so great. This worthy is a recognised though uncertified minor surgeon. Besides his razors, brushes, and scissors he provides himself with lancet, leeches, corn knife, and a variety of surgical and dental instruments. Occasionally, also, he does a little bone-setting, though this is, strictly speaking, within the province of the *curandero*, or bone-setter, to whom I shall shortly refer. On the barber's shelves may sometimes be found a work on anatomy and occasionally a treatise on the virtues of herbs in the cure of ailments. His lack, however, of a good elementary education, to say nothing of the rudiments of medical science, renders these works worse than useless to him, except inasmuch as they enable him to secure a good vocabulary of technical phrases, which, however misapplied to the case in point, have the desired effect of confusing and impressing his already too credulous patrons.

Whilst being shaved in a small town I have had some startlingly new ideas propounded on the theory and practice of medicine. I am afraid, however, that they produced more amusement than instruction, and though careful not to contradict one who, with a razor to my throat, might justly be considered the arbiter of my destiny, I can hardly refrain from hoping that the practice thereof may be strictly confined to the confiding patrons of each village Figaro. The art and mysteries of a *curandero* are handed down from father to son. He devotes himself to setting bones and repairing injuries generally, and his attentions are not confined to man, his field of operations extending to all such members of the animal world as have a master willing to pay the recognised fee, and on the whole his work seems to be fairly well done. Attempts have at various times been made to suppress *curanderos*, but the *vox populi* is with them, and thus far they have been able to maintain their own even in some of the larger towns. I have heard of a noble family sending miles for a celebrated *curandero* when they had the services of two really good surgeons within easy reach. The reasons for their continued prestige are complex and somewhat curious. In the first place, the bone-setter has generally a town and some four to six villages as his field of operations, and in each he, with characteristic modesty, details the marvellous cures he has achieved in the others; secondly, the medical man is an accepted fact, his remedies are supposed to be known quantities, and a knowledge of them open to all who may have the inclination or the means to study them. With the *curandero*, on the other hand, things are differently viewed. His art is a secret one possessed by few, and is looked upon as something like a special gift from Heaven, on the principle of *Omne ignotum pro mirabile*. If we add to this the fact that he has, as a rule, the simpler cases to deal with, and can therefore often show a greater percentage of cures than the certified surgeon, who would be invariably called in to attend a badly fractured limb, it becomes easier to understand how it is that bone-setters still flourish in a country too long deprived of just educational facilities.

NOTES FROM SINGAPORE.

(FROM A CORRESPONDENT.)

The Influenza Epidemic.

THE influenza epidemic of 1895 has not been limited to the "home" countries. During the past three months the Straits Settlements and the adjoining native states have suffered severely from this well-known scourge. The general characteristics of the disease have in no way differed from those which have been noted in Europe. The native Malay, the Eurasian, the immigrant European, Chinaman, Indian, and Arab have all fallen victims to the disease. Amongst Europeans severe or fatal cases have been rare, but the death-rate in the case of Asiatics has been exceptionally high. We have seen the gastro-intestinal, the cerebro-spinal, and the pulmonary forms in great frequency, the last being by far the most common. Pneumonia, broncho-pneumonia, and other forms of pulmonary affections have carried off many of the natives. In a large proportion of these cases the duration of sickness was extremely short. Heart complications have been far from uncommon, and the writer of these notes has met with at least a dozen well-marked examples. The majority have shown acute dilatation of the left ventricle, slow pulse or else a very rapid and feeble one, with frequent irregularity in rhythm, and death from cardiac asthenia in from twenty-four to forty-eight hours. When life in these cases is prolonged various murmurs are to be noted, chief among which are those showing mitral and aortic insufficiency. Irregularity of pulse has persisted in some cases for months after the initial attack, and attacks of angina are frequently met with. As at home, patients who already suffer from heart disease stand a bad chance when struck down by "the grip," and die from cardiac syncope or from a low form of pneumopia. More especially is this the case in beri-beri, for in patients suffering from this disease influenza is exceedingly fatal. When "the grip" occurs in an acute attack little else than cardiac collapse, without appreciable fever or the characteristic pains, the resemblance to an acute attack of beri-beri is most marked. This resemblance is rendered greater in cases, two of which came under my notice, where peripheral neuritis follows close upon influenza as a complication. Both of my cases made perfect recoveries, although one was accompanied by dilatation of the ventricles. Malaria as a sequela has been frequently noted, and in a few cases has been fatal. Amongst Europeans especially I have seen a number of cases of acute phthisis arising as a rule out of unresolved pneumonia, and in these a fatal termination usually ensues in one or two months. Some cases linger on, however, for a longer period. Finally, although I have not the exact figures before me, the death-rate during the last two months or more has greatly exceeded that for the corresponding months of last year.

Epidemic Asiatic Cholera.

Unfortunately, influenza has not been the sole cause of our present high rate of mortality. Asiatic cholera in an epidemic form is a rarity in Singapore, and we have hitherto congratulated ourselves on our immunity from its ravages. Our excellent municipal water-supply has been long held up as the main agent in preventing epidemics of cholera, but that a good water-supply is not a *sine quâ non* in this respect has now been demonstrated to us in a very emphatic manner. Other factors have been at play, such as back-to-back houses, overcrowding, want of proper drainage, and the filthy habits which are a characteristic of most Asiatics. These have finally led to consequences which were sooner or later inevitable. At a meeting of the Municipal Commission on June 19th the medical officer of health, Dr. Middleton, stated that "the death-rate began to rise about the beginning of April, but no cases of cholera were reported. Still it was suspected that there was some epidemic going about the town, though they were unable to get hold of it. Since then, during the last week, the death-rate had risen to 75 per 1000. The first indication of cholera they had was on Monday, the 10th of this month [June], and since then forty cases had been reported, of which thirty-six had proved fatal. ..... There was considerable difficulty in dealing with these cases, because the Chinese and natives concealed them in order to prevent patients being sent to hospital, nor were they usually called in until after death had taken place." The means adopted to check the spread of the disease are, in

Dr. Middleton's own words, these: "Whenever a case was discovered the man was sent to hospital at once, his mats and bedding burnt, and his drinking vessels broken, compensation being given where such articles were destroyed." In all cases, too, the infected house is thoroughly cleansed and disinfected by the municipal authorities.

The Government and the Municipality.

The following letter, received by the President of the Municipal Commission from the Colonial Secretary, was read at a meeting of the Commission on June 19th:—

"Colonial Secretary's Office, Singapore, June 14th, 1895.

"SIR,—I am directed by the Governor to direct the attention of the Commissioners to the exceptionally high death-rate in Singapore for the month of April last, as shown in the Registrar-General's return, a copy of which was sent to you on the 1st inst. (2) It will be seen that the number of deaths in that month recorded was no less than 770, as compared with 477 in the corresponding month of last year, and exceeded by 172 the highest number previously recorded for the month of April during the last ten years. (3) His Excellency is of opinion that the abnormal figures appear to indicate the prevalence in Singapore during the month referred to of some cause of death intentionally or carelessly kept back by the natives from fear of consequences which might result if it were reported, and I am to request that the Commissioners will give their consideration to a matter which would appear at first sight to indicate that much closer attention and supervision on the part of their medical officer may be desirable.

"I have, &c.,

"J. A. SWETTENHAM, Colonial Secretary."

The irony of this letter is evident when one notes that the death return for April was delivered by the Government to the municipal authorities so late as June 1st, that this was the first official indication to the medical officer of health that the death-rate in April was so unusually high, and that the entire onus of such a lax state of affairs rests with the Government by reason of the present erroneous and inefficient system of death registration. Such a wanton censure of an able and energetic medical officer, such an attempt on the part of the Government to make the Municipal Commission a scapegoat for its failings, have led to universal expressions of indignation from the public of Singapore, who now call emphatically for an immediate and radical change in the methods by which vital statistics are at present obtained.

The Present System of Registration of Deaths in the Colony.

The present law makes it the duty of the occupier of a house, in which a death happens to take place, to notify the death within twenty-four hours to the deputy registrar of the district, who is in all cases a police-constable. These are usually Malays or Tamils. Failing a medical certificate, the constable fills up a form and states the cause of death, either following the notifier's statements or giving his own diagnosis from inspection of the corpse or otherwise. In many cases, as was described by Dr. Dumbleton, a retired municipal medical officer, in a paper read before the Straits Medical Association, a medical certificate is by no means a guarantee of correct registration, but is often altered according to the fancy of the deputy registrar. These registers, usually made out in Tamil or Malay, are translated into English at the end of the month and are then forwarded to the Registrar-General. The latter tabulates them, and finally, well on in the following month—in the specific case referred to in the Colonial Secretary's letter fully a month later—they are transmitted to the municipal medical officer. In this way this official is kept in total ignorance of the death-rate in the district which is his special care, and he can have no guide or indication which might lead him to suspect the presence of any unusual fatal element until some weeks later. It might be argued that the Infectious Diseases Notification Act is a help to him in this direction, but the present epidemic shows the fallacy of this. Almost all the cases have occurred amongst the poorest class of natives, who either do not by preference or cannot afford to call in European general practitioners. That the system calls for immediate alteration at the hands of the Government must be evident to everyone who has the welfare of the Settlement at heart. Deputy registrars should be no longer ignorant police-constables. The posts should either be given to trained apothecaries or something akin to the parochial system should be instituted, so that, failing a certificate from the decease'l's medical attendant, a proper medical certificate may in all cases be obtained. All such certificates, too, should be made out in duplicate, one copy going to the medical officer of health within twenty-four hours of the death and the other being sent, as heretofore, to the Registrar-General.

SLAVERY IN ZANZIBAR AND PEMBA.

ZANZIBAR has for many years been known to the public as the starting point of exploring expeditions about to enter Equatorial Africa from the eastern side, and the recent extension of a British Protectorate over the territories of its ruler causes us to regard it with an increased feeling of interest and responsibility. The upper classes are Mohammedan Arabs; they have been slave-traders and slave-owners from time immemorial, and a special investigation of the condition of the negroes has just been made at the instance of the British and Foreign Anti-Slavery Society. The society's commissioner, Mr. Donald Mackenzie, is acquainted with the Arabic language and has had long experience of Mohammedan customs and slavery among the Arabs in North-West Africa. He arrived in Zanzibar on March 2nd, 1895, and devoted about six weeks to his inquiry. The territories of Zanzibar consist of the coral islands of Zanzibar and Pemba, lying about twenty-two miles apart, between 5° and 7° S. latitude; the former island is less than twenty-five and the latter less than thirty-five miles from the African mainland. There are no precise data as to the population, but the late Sultan, who died in 1888, estimated the inhabitants of the two islands at 400,000, of whom 200 were Europeans (merchants) and Goanese (shopkeepers and servants), 8500 were natives of British India (moneylenders and merchants), 10,000 or 15,000 were Arabs (the ruling class), 266,000 were slaves, and the balance were aborigines and slaves who had been set free. The slaves may be classified as domestics (including concubines and eunuchs), plantation workers, chiefly occupied in the cultivation of cloves, and town labourers. These last work under entirely different conditions from the domestic and plantation slaves. They are employed: (1) in the loading and discharging of vessels and in general warehouse and town labour, women being largely engaged in this work and especially in the coaling of steamers, including British men-of-war; (2) as porters who carry goods or stores into the interior of Africa; and (3) as domestic servants to Europeans, natives of British India, and Goanese, who not being themselves allowed to possess slaves have to hire them from their owners. All British subjects deal with the slaves directly and not with the master, or they may hire them from a contractor, who need not necessarily be a slaveholder, but who knows where to get them. Employers pay wages to the slaves, who, in turn, hand to their masters half of their earnings, and with the remainder have to buy their own food and clothes; in the case of porters the hirer has to provide them with food. The pay of porters and harbour labourers is usually ten rupees per month; women labourers receive less. The regulation load of porters is 70 lb. each, but beyond that they have to carry food, water, and cooking utensils, which may bring the load up to 100 lb. or more. They have to march about twelve miles a day. These slave porters are the only means of transport for our Government and for missionaries and merchants between the interior of Africa and the coast. If any of them are taken ill they are left by the path-side to die, their loads are distributed among the others, and the caravan proceeds on its march without any further notice being taken of those who drop by the way. The mortality amongst them was given to Mr. Mackenzie on the very highest authority at 30 per cent. Domestic servants are generally men, and they receive about seven rupees per month; the women are water-carriers and are paid five rupees per month. They all receive their wages directly from their employers, but each hands to the master one-half. A slave is told by his master to seek employment, and if he cannot find it he is punished. The masters have hardly any responsibility as regards the slaves and only provide them with food when they are out of employment. None of the slaves possess any civil rights except that they can complain against their masters to the British Consul-General, but at present very few know of the Consul-General, and under existing circumstances freedom would be no benefit to them, for they would be outcasts, and their masters would have many ways of getting rid of them by poison and otherwise. Many of the slaves who have been set free by the Consul-General have afterwards been kidnapped and all trace of them has been lost. Mr. Mackenzie was much impressed by the fact that very few children are born to slaves, owing, it is said, to the manner in which very young girls are treated

by the Arabs and others; hence the necessity for continued importation from Africa to keep up the number. Taking the death-rate at 30 per 1000, upwards of 7000 slaves would have to be imported annually. He is of opinion that some 6000 are imported yearly into Zanzibar and Pemba from the mainland, not in dhows, which attract too much attention, but in sailing canoes, of which there are upwards of 2000 in Zanzibar and quite as many in Pemba. The export of slaves to the Arabian coast from the mainland of East Africa is probably some 11,000 per annum. About 1500 dhows are known to make two voyages a year, one to Zanzibar and East Africa and the other back to Arabia in the south-west monsoon; each of these vessels takes on an average seven slaves, though some may carry a larger number. According to the report of the Select Committee on the East African Slave Trade, presented to Parliament in 1871, the export from the mainland into Zanzibar and the Arabian coast amounted to upwards of 20,000 slaves per annum. In nearly all the dhows which have been captured going north in these parts from time to time small boys were found mutilated for eunuchs for the harems in Arabia. These boys are operated upon by native doctors, and the mortality is reported to be very great. The Sultan of Zanzibar is said to have fifteen eunuchs to guard his harem, but it does not appear that any other Arabs have them in these islands. The Sultan is the principal slaveholder, being supposed to own 30,000 slaves. Of his subjects, one has six *shambas* or estates, with 3000 slaves on each, and another has seven *shambas* and 10,000 slaves.

Mr. Mackenzie gratefully acknowledges the assistance and information he received from Mr. Hardinge, the British Agent and Consul-General, Sir Lloyd Matthews, the Prime Minister of the Zanzibar Government, Archdeacon Jones-Bateman, and others. He is convinced that the legal status of slavery should be abolished as soon as possible, although the majority of the European residents are in favour of its retention on economic and utilitarian grounds. He has also given an interesting account of his visit to the island of Pemba, where he spent several days, being, as he understands, the first European to explore it.

THE BATTLE OF THE CLUBS AT BRUSSELS.

(FROM OUR SPECIAL COMMISSIONER.)

THE cause which led to the resignation of the twenty medical men who were engaged in the service of the Federation of Mutualist (or benefit) Societies at Brussels has been fully explained.[1] There are, however, lessons to be derived from this struggle which are worth noting. First and foremost stands the fact that at Brussels, as at Cork, the great mass of the working population at once took sides against the medical men. Undoubtedly, and this has been demonstrated over and over again, it is doubly difficult to bring such a movement to a successful issue unless popular sympathies are enlisted. The first care, therefore, that medical men should take is to put themselves right with the public. The great blunder committed at Brussels has been the omission of this precaution. The Medical Syndicate has negotiated with the committee of the Mutualist Federation, as if these two bodies alone were concerned. The consequence is that a quarrel has broken out in which some 50,000 persons are materially concerned, and not one in a hundred knows what it is all about. Yet it was all the more necessary that the Medical Syndicate should appeal to the rank and file of the Mutualist societies, as the committee representing the federation of these societies is composed in the main of precisely the element most affected by the action of the medical men. What can be said of Brussels will be found to hold good very generally in England. The majority of members of such clubs or benefit societies are workmen or others whom the medical profession are very willing to attend at low contract rates because they are too poor to pay proper fees. But there is also, though in much smaller numbers, a middle-class or well-to-do element which the medical profession rightly consider should be excluded from such benefits. Now, it is precisely this well-to-do, middle-class element which, by reason of its superior education and ability, supplies a very large portion of the members of committees, managers, secretaries, &c. of the clubs. Thus medical men sometimes find themselves obliged to propose the exclusion from medical benefits of the very members of the committees with whom they have to negotiate. Under such circumstances it will be seen how very important it is to appeal from the committees to the constituencies. This is all the more necessary as what the medical men desire is really to the interest of the poor members of benefit clubs. Great care should be taken to point out that comparatively rich persons are unjustifiably trespassing on the time medical men should devote exclusively to the poor. How thoroughly the whole state of the case was misunderstood by the rank and file of the benefit clubs of Brussels I had an excellent opportunity of estimating.

A general meeting of Mutualists was convoked at the Alhambra, one of the largest theatres of Brussels. Though I arrived in good time, and the theatre is said to hold some 5000 persons, I found that the police had already closed the doors, the crowd being so large that an accident was feared. It was with the greatest difficulty, and as a special privilege to the press, that I obtained admittance and standing room to witness the proceedings. The speeches, delivered for the most part by members of the committee of the Mutualist Federation, represented the medical profession as actuated by the most sordid motives. The medical men, the public were told, wished to institute an inquisition so as to ascertain the precise state of every member's fortune. Each member of a benefit society would in future have to be provided with a diploma of indigence. It was an insult to thus qualify them all as paupers. They were not paupers, but prudent men who took out an insurance against possible sickness. It was not because a few persons had attained easy circumstances that the advantages of benefit clubs should be withdrawn from the others. One speaker had joined when he was earning as a clerk £64. He was then able to save enough on this to buy a gold chain for his watch. Now he was earning £180; but, as a husband and father of a family, he found himself so much poorer that any purchase of luxuries was quite out of the question. He felt that with the larger income he was more entitled to join a benefit society than with the smaller income. Another speaker said that benefit clubs were as commercial travellers working on behalf of medical men. They took the young, unknown practitioner, perhaps they did not pay him much, but they made his reputation and created his practice. Medical men were roundly abused by several speakers. Some were described as riding about in luxurious carriages and refusing to put their science at the service of the poor; but they utilised the poor as a mere field for experiments. Then we were led to infer that there was a nice little piece of jobbery going on between the Medical Syndicate and the dispensing druggists. An alliance had been formed between the medical men and the druggists to crush out of existence the "popular pharmacies"; and, if this was successful, it would be the death warrant of all coöperative societies and enterprise.

This was a very effective thing to say, as the whole of the Belgian labour movement derives its strength from vast coöperative productive and distributive societies that pay no dividend, but employ the profits to reduce the sale price and for purposes of political propaganda. This argument was, therefore, a distinct bid for the support of the Belgian Labour Party, which has returned thirty out of the 150 deputies that constitute the Belgian Parliament. It might be inferred that the popular pharmacies are coöperative institutions similar to those founded by the Labour Party; this, however, is not at all the case. The popular pharmacies were started some time ago by an individual, and as a speculation. This individual went the round of the benefit societies, offered to give them a large financial interest in his business if they would reserve their custom to his pharmacies and give him a certain sum to form what he called a guarantee fund. By means of this fund he got the capital for his business and assured himself of the custom of the benefit societies. Nine such so-called popular pharmacies were opened in different parts of Brussels. Of course, when it was seen that the mutualists all went to these popular pharmacies the general public also patronised these establishments, being under the impression that the medicaments were sold at a much cheaper rate. Thus an enormous trade has

[1] THE LANCET, Aug. 24th, 1895, p. 476.

been done, and the benefit societies got back as their share of the profits a large amount of the money they spent in drugs. I have seen the accounts of one society which paid in the course of last year 13,195 francs for drugs to the popular pharmacies, but got back as its share of profits for the same year 9937 francs! Naturally these profits were made in the main, not out of the members of the benefit societies, but out of the general public, and this of course greatly to the detriment of the ordinary druggists. So keen is this grievance that a law has been passed in the Belgian Parliament, and will come into force next year, by which societies of this description shall be allowed to sell only to their own members and not to the general public. It seems, therefore, that if there is any jobbery at all with regard to the dispensing of medicaments to members of benefit societies, it rests with those benefit societies themselves rather than with the medical profession. The medical men do, however, urge that it is very awkward for so large a town as Brussels to have only nine pharmacies where the members of the societies can get their medicaments. This is the greater inconvenience as, though they often have to go very far for the drugs, they do not get them any cheaper. On the contrary, the 180 dispensing druggists of Brussels have agreed to charge all members of the Federation of Benefit Societies only half what they are in the habit of paying at the popular pharmacies. By this arrangement the rank and file of the benefit societies could go to the nearest druggist or to any druggist for whom they might have a preference. This would be much more convenient and cheaper, but it would put an end to the profits which the benefit societies derive from trading with the general public.

There was one feature in the meeting by which I was greatly impressed. Nearly all the speakers used against the Medical Syndicate the usual arguments brought to bear against trades-unions when there is a strike. Strange to say, the working men who composed a large section of the audience were trades-unionists and must themselves have been on strike many a time, utterly failed to recognise that they were combating the medical men with identically the same arguments which had been employed against them when they as workmen strove for higher wages or shorter hours. For instance, a letter was read from the secretary of the Medical Syndicate, couched in strong language and pointing out to some medical man the consequences that would accrue if he worked for the Mutualist Federation against the interests of his own profession. It was just such a letter as the secretary of a trades-union would write to a "blackleg" during a strike. One would have expected the working men present to have recognised the tone at once and to have applauded its contents; but, on the contrary, they allowed a speaker to invoke the law in favour of the "liberty to work" by which "blacklegs" are protected against strikers, and to declare that no society will submit to the tyranny of a medical syndicate, just in the same language as employers declare that they will not submit to the tyranny of a trades-union. It was extraordinary to note how quickly working men, who were for the moment in the position of employers, at once adopted the tone, the language, and the arguments of the capitalist fighting against the claims of labour, and, furthermore, unanimously voted in favour of a resolution to that effect.

This state of feeling must be reckoned with; and wherever such a struggle breaks out it must be checked or altogether prevented. That it arose at all is due to the fact that the Medical Syndicate limited its efforts to negotiations with the middle-class committeemen of the Mutualist Federation and either did not attempt or was not successful in making its voice heard by the rank and file. It should be made manifest to the working classes that in so far as a medical man earns his living by practising medicine he is, economically speaking, in identically the same position as a skilled artisan who has had to serve a long apprenticeship to learn his trade; that he has the same right to form a trades-union, and, short of physical violence, may morally seek to coerce all members of the profession into joining the union; finally, that if a workman wishes to be well treated by his employer he must, when himself in the position of an employer, treat equally well those whom he employs. There are very few trades-unions in any part of the world which would not readily accept this argument. It is because benefit clubs have in their ranks a considerable number of middle-class men and small employers that these principles have not governed their relations with the medical profession. The latter will find its interests best understood, and best served, by appealing directly to the working-class element — particularly, as in this instance, the economic position and the personal interests of the working class and the medical profession are identical. Besides, as the secretary of the Medical Syndicate pointed out to me, the working men are absolutely robbed by the middle-class element. To use his own words, a rich man by joining a benefit society commits a crime. Charity concerts, bazaars, and other means are employed to raise funds to enable the benefit societies to relieve the poor. Money is spent and given to organise a medical service for that purpose; then a rich man comes and avails himself of this cheap medical service, thus appropriating to himself some of the money and services given expressly for the poor. This state of affairs, if properly understood, would never be approved by the working classes; but medical men, to carry this war to a successful end, must give themselves the trouble to thoroughly educate the masses on the question at issue.

Brussels, Aug. 24th.

THE FIFTH INTERNATIONAL CONGRESS AGAINST THE ABUSE OF ALCOHOL.

As announced in THE LANCET of Aug. 10th, Bâle was the seat of this the Fifth International Congress for Combating the Abuse of Alcohol, and the 20th inst. the day of meeting. The attendance was considerable, not a few interested in the subject having taken a few days from their Swiss holiday to assist at the proceedings. The president of the Organising Committee, Dr. C. Ch. Burckhardt, bade the meeting welcome, and then the chair was taken by the Dutch Minister of State, M. Heemskerk, president of the permanent committee. His Excellency opened the proceedings by a brief *résumé* of the progress made in the movement since the last Congress at the Hague in 1893, after which three papers were read on the physiological and psychological effects of alcohol. Professor Gaula of Zürich, followed by Dr. Smith of Marbach and Dr. Fürer of Heidelberg, dwelt on the influence exerted by alcohol on the cerebral substance and on the deteriorating effects of the stimulant, even in moderation, on the memory and reasoning faculties. Intellectual work, the two latter contended, is always better during periods of abstinence than when strong drink is even sparingly indulged in. The discussion on these positions was slight, almost perfunctory, but became more animated when the reports of the directors of the lunatic asylums came to be read—reports of which Dr. Legrain of Paris and Professor Forel of Zürich had charge. Their conclusion was that lunacy increases in direct proportion to the abuse of alcohol. This, accepted in the main by M. Milliet, Director of the Federal Office for the Control of Alcohol, was supplemented by the same speaker in a modifying sense, his argument being against absolute disuse of alcohol, while he demonstrated the effect of other causes as responsible for many of the evils ascribed by Dr. Legrain and Professor Forel to alcohol alone. He was effectively supported by M. Bode of Hildesheim; but the preponderance of the meeting's sympathies was evidently in favour of total abstinence, Dr. Ridge being its eloquent and most uncompromising advocate. The first day's proceedings concluded with an elaborate paper by Dr. Lancelot, delegate of the French Minister of Public Instruction. His subject, ably treated, was the Characteristic Effects, Physiological and Psychical, of the Different Kinds of Alcoholic Beverages.

The second day (the 21st inst.) was devoted to the action of the various anti-alcoholic organisations throughout Europe, Monsignor Egger, Bishop of St. Gall, introducing the discussion with a special salutation from the Pope, who is well known as a promoter of the temperance cause. The leading participants in the proceedings were M. L. L. Rochat (representing Switzerland), MM. Bode and Tienken (who spoke for Germany), MM. Kraar and Bergmann (for Scandinavia), the venerable octogenarian Professor Valeta (for Holland), M. Wagener (for Denmark), and Miss Charlotte Gray, who related the work achieved in the different European countries by the Good Templars. From the *ensemble* of the speaking the conclusion was

inevitable that organised control of the consumption of alcohol is only on the threshold and that the results hitherto attained are, on the whole, satisfactory. The European countries where most progress of a real kind has been made are Norway and Sweden. As usual, the conflicting camps of "absolute abstention" on the one hand and "moderate use" on the other engrossed the greater part of the discussion—the result in point of argument, if not in point of numbers, being "drawn." Later in the day the Rev. Grant Mills and Dr. H. Christ gave interesting accounts of the appalling effects of alcohol among the savage tribes of Africa. This exposition suggested a modification of the Treaty of Brussels of 1890–91 in the direction of a far more stringent prohibition of the importation of alcohol into the Dark Continent. This modification, however, as a question of law, lay outside the power of the Congress, which had, therefore, to remain satisfied with putting on record its opinion. Two important papers followed from MM. Koblinski of Düsseldorf and Marthaler of Berne, penitentiary chaplains, who dwelt on the influence of alcohol in fostering crime. These, the second day's proceedings, were wound up by a banquet the simplicity of which proved no bar to much geniality, which found expression in effective speeches, all impressed with international fraternity.

The effect of alcoholic abuse in fostering crime was on the third and last day made prominent by M. Denis, who endeavoured by elaborate statistical returns to show the length to which European countries had gone in combating this source of criminality. France and Belgium, where no serious attempt has been made to restrain the spread of alcoholism, have, he said, the worst record in regard to crime. Switzerland and Holland, he contended, where the restrictive movement had already begun, had rendered crime "stationary," preluding a reduction in its prevalence as the movement became more energetic. Norway and Sweden, as already indicated, could boast of a distinct diminution in their criminal population, thanks to their control of alcoholism. From this the proceedings diverged into the subject of special asylums for drunkards. MM. Bleuler, Arnold-Bovet, Smith, and others contributed valuable expert evidence to its elucidation and strengthened the conclusion that these asylums should be multiplied, free from State control, and none of them on too large a scale—certainly not on the scale of that proposed in France to be established at the gates of Paris. Then the "full-dress debate" of the day was opened—on the State "monopoly in alcohol"—a principle ably advocated by M. Milliet as the only possible solution of the difficulty, at least in Switzerland, under present circumstances. On the other hand, its application to all countries indiscriminately was strenuously opposed by MM. L. L. Rochat and Moeller of Brussels, while M. Alglave supported it as an ideal to aim at. The afternoon sitting was employed in reorganising the permanent committee, so as to combine into one single committee the executive committee proper and the old permanent committee. Brussels was thereafter named as the seat of the next—the sixth—congress, to be held in 1897. After this, the subject of temperance cafés and restaurants was introduced, followed by the discussion of alcoholism in its relation to the working classes. The proceedings were at this stage enlivened by the intervention of a highly intelligent Socialist artisan, M. Bruno Gutsmann, who vigorously sustained the thesis that the cause of labour will never "find salvation" so long as the representative working man drinks, even moderately; contending at the same time that the state of society, as at present constituted, actually "condemned him almost fatally to alcoholism," a statement which was received with considerable reserve. M. Gutsmann was seconded by his fellow reporter, Mr. Martin Skinner, who replied to the objections raised against abstinence by a certain class of Socialists, and was in turn subjected to some vivacious but perfectly courteous criticism on the part of the "moderates." The concluding papers were occupied with the education of children in temperance principles—a well-considered subject on which the Congress was virtually unanimous.

The consensus of opinion on the Congress is a favourable one so far as its temper and ability are concerned—certainly it has been exempt from such scenes as characterised its predecessor of 1893 at the Hague. But—the besetting sin of all congresses—the agenda paper was far too crowded, the number and length of the papers sent in being out of all proportion to the time at the disposal of the Congress. Fewer subjects, more succinctly treated, and ampler notice given of their tenour, will in future be found a salutary innovation in the system hitherto adopted. As to the general arrangements for the convenience and comfort of the members, this latest one at Bâle contrasts favourably with all its predecessors. A special word of praise is due to the entertainments by which its labours were relieved—the *soirée* given by the abstaining students to the members in the Casino d'Été being particularly commendable for the refined hospitality by which it was characterised.

Bâle, Aug. 24th.

CHOLERA.

WE learn from Singapore that cholera was prevalent among the natives of this station during the summer, and that one European, an officer of the Northumberland Fusiliers, had succumbed to the disease.

But Japan is the country that has had a terrible experience of cholera of late, following the recent war and close communication with China and Corea. The epidemic in Japan attained large proportions and proved very fatal. Out of 25,000 cases 16,000 deaths were returned. We shall, no doubt, be furnished with a medical history of the epidemic by the Japanese medical authorities in the course of the year, and it will be interesting to ascertain the views entertained by an intelligent and very enterprising people as to the causes of the disease and the methods by which it is believed to have been introduced and spread in that country. So far as Europe is concerned, it is not likely that it will be affected by an extension of the epidemic from Japan.

The Vienna correspondent of the *Times* says that on the 23rd inst. a death took place at Tarnopol in Galicia and the provisional diagnosis of Asiatic cholera has now been confirmed by bacteriological examination.

THE CASE OF MR. R. B. ANDERSON.

THAT all British subjects are entitled to the benefits of an impartial administration of justice everywhere throughout this realm is a cardinal maxim of our legal system. The agents and exponents of the law are fallible, like other human beings, but hardships arising from this natural defect in most cases admit of reparation. The broad principles of justice are practically unalterable, and the security of individual members of the community is understood to be guaranteed by publicity and by the right of appeal. The conspicuous integrity of the administration of the law in England tends to foster this belief. Not within the present century have judges in this country been charged with systematic partiality, bias, and misuse of judicial powers. The same, however, cannot be said of all parts of the Queen's dominions. For some time past the columns of THE LANCET have contained frequent references to the remarkable hardships which have been illegally, but in the name of the law, inflicted on a member of our profession, Mr. R. B. Anderson, of the Island of Tobago, in the West Indies. This gentleman, who in 1873 became a Fellow of the Royal College of Surgeons of England, settled in Tobago, where he attained considerable success in practice and received the appointment of colonial surgeon, an office which after he had held it for five years was discontinued, Mr. Anderson receiving a pension by way of compensation. By the year 1889 he had been about sixteen years in practice in the island; he was, moreover, a justice of the peace, an elected member of the Legislative body, and a landowner. In that year, and after he had ceased to be the colonial surgeon, he was consulted by a coloured woman named Marshall, who suffered from limited necrosis of the lower jaw. After some months' preliminary attendance, necessitated by the unsatisfactory state of the patient's health, Mr. Anderson, with the assistance of a medical friend, cut down upon the sequestrum. It did not separate immediately, the patient's husband made himself objectionable, and after some weeks' further attendance Mr. Anderson suggested that they should seek other advice,

and retired from the case. About a fortnight after his attendance ceased, the sequestrum became loosened, and was easily removed by Dr. Tulloch, of Tobago, merely with his fingers. Mr. Anderson's professional charges not being paid, he took proceedings in the Petty Debt Court, and after some inexplicable delay found that the Chief Justice, Sir John Gorrie, who was then in the Island of Trinidad, had given special directions that this case was not to be tried until his (Sir John Gorrie's) arrival in Tobago. In the meantime Mrs. Marshall and her husband sued Mr. Anderson *in formâ pauperis* for £15 damages; there was no shadow of proof that the female plaintiff had sustained any injury, and the principal charge alleged against the defendant was neglect, inasmuch as he had improperly ceased to attend the plaintiff and retired from the case before recovery was complete. In the result the Chief Justice, in the beginning of 1890, gave judgment for the plaintiff for practically £17 10*s*., with costs for breach of contract—for which the plaintiffs had not sued, neither had their plaint been amended to include it. Sir John Gorrie further stated, without any reservation, that a medical man, as such, and merely by becoming qualified, was bound to attend all cases of illness to which he was summoned, and that no medical man had a right, without the consent of the patient, to abandon any case which he had begun to treat, even where other medical aid was available and where the patient was running no risk from such abandonment, and that by so doing he laid himself open to an action at law, civil or criminal. He also stigmatised the making of contracts prior to attendance as an unprofessional and improper act on the part of the practitioner. It is almost needless to add that Mr. Anderson's claim for fees was disallowed by Sir John Gorrie. About a year afterwards—viz., on Jan. 20th, 1891—summonses in a non-medical case were taken out against Mr. Anderson. The plaintiff sued *in formâ pauperis*, no affidavit was made to show that the debts were unpaid, and the total amount of the judgment debts, including costs, was £42 2*s*. The case was tried in Tobago before Mr. Justice Cook, and Mr. Anderson was on Jan. 23rd ordered by this judge, upon adjournment of his examination, to give his security in £500 and also to find bail in £500 for his appearance at the adjourned hearing of the summons, and in default of giving such security he was committed to prison, where he remained until the adjourned hearing was resumed on Jan. 30th. On that day Mr. Justice Cook again adjourned the hearing after some examination and required Mr. Anderson to find security for his appearance, as before, in two sums of £500 each. Five well-known residents, three of whom were members of the Legislative Council, perceiving that a grave injustice was being perpetrated, went in a body to the judge to offer the security. Mr. Anderson was sent to England in 1891 by public subscriptions raised in Trinidad, to lay his wrongs before the home authorities and the public. On Sept. 14th of that year he instituted his remarkable action in the Court of Queen's Bench against the Trinidad judges (Anderson *v.* Gorrie and others). The facts disclosed were too flagrant to be overlooked. In 1892 a Royal Commission, consisting of Sir William Markby and Sir Frederick Pollock, was appointed to inquire into the administration of justice in Trinidad and Tobago, and their report resulted in the removal of Mr. Justice Cook from office. Sir John Gorrie was also interdicted pending the formal bringing of charges against him, but the interdiction was soon followed by his death. Mr. Anderson's action against the judges only came on in April, 1894, and occupied seven days, before the late Lord Chief Justice Coleridge and a special jury of Middlesex. In the course of the trial Lord Coleridge stigmatised the imposition of the bail already mentioned as "a piece of unmitigated, unlawful tyranny," and in the course of his summing-up said:—"The proceedings for contempt of court taken against the plaintiff for having petitioned the Queen were quite unjustifiable. Then judgments having been obtained against Mr. Anderson for £42, Mr. Justice Cook held him to bail for £500. He confessed he could not understand how an English judge could have so acted." The verdict was as follows:—"The jury find that the defendant Cook oppressively and with malice overstrained his judicial powers to the prejudice of the plaintiff and the wilful perversion of justice, and found a verdict for the plaintiff for £500." Lord Coleridge, however, entered judgment for the defendant on the ground that no action will lie against a judge for an act done in his judicial capacity, and this judgment has been confirmed by the Master of the Rolls, Lord Esher, and the Court of Appeal.

Mr. Anderson is, therefore, in an exceptional and almost unique manner the helpless victim of judicial persecution. He has been forced into heavy expenditure in the defence of his natural rights—an object so dear to every Englishman—and now he has the additional mortification of finding that the survivor of his persecutors is by a legal technicality placed above the ordinary operation of law, and thereby enabled to evade making reparation for his unlawful acts. Mr. Anderson's courage is admirable, but it is impossible to avoid pitying him. His thriving practice has been broken up, judgments unjustly given against him in Tobago are still in force and prevent him from returning to the island, whilst his means are consumed in the unequal struggle against an impassive officialism which admits the justice of his cause and the reality of his hardships but fails to provide redress.

FIFTH INTERNATIONAL CONGRESS OF OTOLOGY.

IN reference to this congress, which will be held at Florence from Sept. 23rd to 26th, Messrs. Thomas Cook and Son of Ludgate-circus, London, E.C., have made the following arrangements for issuing tickets to Florence by all routes. As delegates will be entitled to tickets at greatly reduced fares on the Italian railways by production of their certificate of membership at the railway station at the frontier, Messrs. Cook and Son also issue tickets to Modane, Vintimille, or Chiasso by all routes. The following are a few examples of the chief routes:—

Route.	Fares. Single journey from London to															
	Chiasso.				Modane.				Vintimille.				Florence.			
	1st Cl. £ s. d.		2nd Cl. £ s. d.		1st Cl. £ s. d.		2nd Cl. £ s. d.		1st Cl. £ s. d.		2nd Cl. £ s. d.		1st Cl. £ s. d.		2nd Cl. £ s. d.	
Newhaven, Dieppe, Paris.	5	14	3	4	0	3	4	16	9	3	7	9	6	15	9	4
Dover, Calais, Paris.	6	15	9	4	13	10	5	19	3	4	1	9	7	18	3	5
Dover, Calais, Laon.	6	16	10	4	16	2	—		—		—		—		8	16

Route.	Fares. Single journey from London to							
	14 Cl. £ s. d.		14 Cl. £ s. d.		7 Cl. £ s. d.		7 Cl. £ s. d.	
Newhaven, Dieppe, Paris.	14	0	7	8	3	5	3	8
Dover, Calais, Paris.	8	3	10	8	5	17	8	
Dover, Calais, Laon.	5	6	3	10				

Messrs. Cook and Son can also supply circular tickets from London to Dover, Calais, Laon, Lucerne, St. Gothard, Chiasso, Milan, returning *viâ* Turin, Modane, Paris, Calais, Dover, London, at £11 5*s*. 1*d*. first class and £8 4*s*. second class; and through tickets from Southampton to Genoa by North German Lloyd steamers, leaving Southampton on Sept. 1st and 15th, and arriving at Genoa on Sept. 9th and 23rd, at—single journey, first class £8 13*s*., second class £5 8*s*. 6*d*.; return journey, first class £14 8*s*. 6*d*., second class £9 1*s*. Through tickets from London by Orient steamer, leaving Tilbury on Sept. 6th and 20th, and arriving at Naples on Sept. 15th and 29th. Fare to Naples, £14 first class, £10 second class. Or by Peninsular and Oriental steamer, leaving Sept. 13th.

THROUGH SERVICES TO FLORENCE.

London to Paris viâ Calais.

Stations.			1st & 2nd Cl.	1st & 2nd Cl.	1st, 2nd, & 3rd Cl.
Victoria		d.	9 0 a.	11 0 a.	8 15 p.
Holborn		d.	9 0	11 0	8 10
St. Paul's		d.	9 2	11 2	8 12
Herne Hill		d.	9 10	11 10	8 25
Canterbury		d.	—	11 29	9 41
Dover Pier		a.	10 45	12 50 p.	10 7
		d.	10 55	1 0	10 15
Calais Pier (abt.)	English time (about)	a.	12 15 p.	2 20	12 10 a.
	English time	d.	12 44	2 55	12 59
	French time	d.	12 49	3 0	1 4
Amiens		a.	3 4	5 12	3 41
		d.	3 9	5 17	3 46
Paris (Nord)		a.	4 45	7 0	5 38

London to Paris viâ Dieppe.

Stations.	1st & 2nd Cl.	1st, 2nd, & 3rd Cl.
Victoria Station ... ... d.	10 0 a.	8 50 p.
London Bridge ... ... d.	10 0	9 0
Newhaven ... ... d.	11 30	11 0
Dieppe ... ... d.	3 34 p.	4 23 a.
Paris (St. Lazare) ... ... a.	6 55	8 0

Paris to Florence viâ Turin.

Stations.	1st & 2nd Cl.		1st & 2nd Cl.
Paris (Nord Buffet) ... ... d.	7 44 p.		6 23 a.
Paris (Lyon Buffet) ... ... a.	8 26		7 15
Paris (Lyon Buffet) ... ... d.	8 50 p.	...	2 15
Aix-les-Bains ... ... a.	6 30 a.	...	12 26 a.
Chambéry ... ... a.	6 58	...	12 51
Turin ... ... a.	2 20 p.	..	8 10
Turin ... ... d.	2 45 p.	8 10 p.	8 40 a.
Genoa ... ... a.	6 14	11 21	12 0 p.
Florence ... ... a.	12 45 a.	7 30 a.	6 54 a.

London to Florence viâ Calais, Laon, and St. Gothard.

Through Carriages, 1st and 2nd class, from Calais to Bâle at 2.50 P.M., and at 1.4 A.M.; also 1st class Sleeping Car at 2.50 P.M. to Bâle, 16s. 6d. each berth.

Stations.	1st Cl. Luxe.	1st & 2nd Cl.		1st & 2nd Cl.
London (Victoria (W. E.)) d.	11 0	11 0 a.		8 15 p.
London (Holborn (C. T.)) d.	11 0	11 0		8 10
London (St. Paul's (C. S.)) d.	11 2	11 2		8 12
Herne-hill (S. Lond.) ... d.	11 10	11 10		8 25
Dover ... ... d.	1 0 p.	1 0 p.		10 15
Calais Pier ... ... a.	2 20	2 20		12 10 a.
,, (French time) ... d.	2 45	2 50		1 4
Reims ... ... a.	7 44	8 16		6 36
Chalons (Dine, stop 23 min.) ... ... d.	8 43	9 42		8 0
Belfort ... ... a.	1 31 a.	2 44 a.		2 27 p
Delle ... ... d.	3 5	4 22		†
Bâle ... ... a.	5 0	6 30 a.		5 25 p.
Bâle ... ... d.	Interlaken-Engadine Exs. Weds. and Sats. only from Calais, with extra fare.	7 25 a.	7 47 a.	8 35
Lucerne ... ... a.		9 36	10 35	10 51
Lucerne ... ... d.		*9 50 a.	10 50 a.	11 0
Goeschenen (B., 20 min. stop) ... ... d.		*12 33 p.	2 5 p.	2 13 a.
Bellinzona ... ... a.		*2 22	4 10	4 18
Lugano ... ... a.		*3 10	5 10	5 25
Chiasso (Italian Customs) ... ... a.		*3 45	5 55	6 10
Milan ... ... a.		5 23	7 42	7 52 a.
Milan, Bologna, Florence (Adriatic route.) d.		...	10 10 p.	11 30 a.
Milan, Bologna, Florence (Adriatic route.) a.		...	2 12 a.	2 52 p.
Milan, Bologna, Florence (Adriatic route.) a.		...	6 23 a.	6 25
Milan, Genoa, Florence (Med. route.) d.		...	8 40 p.	9 15 a.
Milan, Genoa, Florence (Med. route.) a.		...	11 40	12 18 p.
Milan, Genoa, Florence (Med. route.) a.		...	7 30 a.	5 54

* First Class only Lucerne to Chiasso.
† Viâ Petit-Croix.

Public Health and Poor Law.

LOCAL GOVERNMENT DEPARTMENT.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

Surrey County Sanitary District.—Dr. Edward Seaton's report for this district during 1894 is arranged in subject sections; in each section, in addition to a general review by the county medical officer, is given a synopsis of those parts of the district reports relating to the subject. During the year 1894 Dr. Seaton attended numerous conferences and Government inquiries, made a large number of inspections, and drew up several reports. In reference to the county medical officer of health's attendance at Government inquiries an instruction has been drawn up by the council and inserted in the standing orders, that as far as possible he shall attend all such inquiries as relate to the public health of the county for the purpose, in the first instance, of affording to the inspector holding the inquiry any information in his power. He is, however, not to appear as a witness on either side save in cases where his advice has been sought by the sanitary authorities and given to them after consultation with, and with the consent of, the sanitary committee of the county council. Dr. Seaton records considerable improvement in the reports of the district medical officers of health, though there is, he states, still a wide difference between those drawn up by those who devote their whole time to the duties of their office and those who do otherwise. In certain districts Dr. Seaton remarks that substantial improvement in the sanitary condition can only be brought about by the amalgamation of districts and the appointment of medical officers of health who shall devote all their time to their work. The county general death-rate was for 1894 but 11·9—i.e., 2 per 1000 less than the average of the previous quinquennium. Notification is now common throughout the county, and Dr. Seaton, in referring to the influence which county opinion has had upon the general adoption of the Notification Act, alludes to the case of Buckinghamshire, where, as he remarks, the attempt by the county council to cultivate a county opinion has signally failed. Certainly this is so, if we may take the vitality of the Buckinghamshire sanitary committee as evidence. In the matter of zymotic disease diphtheria presents a depressing aspect, giving rise as it did during 1894 to a death-rate of 25 per 100,000 in the urban districts and 38 per 100,000 in the rural districts. Comparing these rates with those for scarlet fever, we learn that this disease causes a death-rate of but 2 per 100,000 in the urban, and 5 per 100,000 in the rural districts. Enteric fever again caused a death-rate of 9 per 100,000 in the urban and 8 per 100,000 in the rural districts. The subject of isolation provision has received much attention during the past year, but Dr. Seaton regrets that he is unable to chronicle the carrying out of any scheme. The water-supply of the county is dealt with very fully and lucidly by Dr. Seaton, and he states that in many of the rural parts of Surrey water from surface wells is still general, in spite of the fact that in certain parts of the district a far safer supply is easily procurable. With reference to the river-water supplies, the need for extending the mains of some of the metropolitan companies and of the West Surrey and South-west suburban companies is insisted upon. There is no evidence, Dr. Seaton remarks, that the floods of 1894 have produced any ill effects as regards the health of the county so far as the river water-supplies are concerned. A very concise synopsis of "Subjects of Importance" referred to by the medical officers of health in the county is given in the form of a sheet in Dr. Seaton's very interesting report, which shows at a glance those matters which are receiving attention and those which are not. The report also gives an abstract of the quarterly reports of the county analyst and of the chief inspector under the Contagious Diseases (Animals) Act.

Essex County Sanitary District.—Calculated upon the usual basis, the population of the administrative county of Essex was in the middle of last year 635,590, that of the urban districts being 363,620, and that of the rural 271,970. The birth-rate for 1894 was in the urban districts 30·2, and in the rural 26·2 per 1000. Commenting upon the decreases which these rates evince, Dr. Thresh observes that there is a disposition to view a declining birth-rate with satisfaction without inquiry as to its cause, the fact that the cause or causes may be anything but satisfactory being ignored. The general death-rate in the urban districts of the county was 13·0 per 1000, and in the rural districts 13·3. Dr. Thresh remarks that these remarkably low death-rates may be due in some degree to favourable meteorological conditions, and also to the devastating influence of influenza which occurred in previous years. We cannot hope, he points out, to reduce our general death-rate to 13·1 per 1000 before many years have been spent in sanitary reform and in the education of the people in all that makes for longevity. The infantile mortality for the whole county was during 1894 but 109 per 1000 births. In the matter of zymotic diseases the most noticeable feature in the county statistics is the fact that both in the urban and rural districts diphtheria is accountable for more deaths than small-pox, scarlet fever, typhoid fever, and measles combined, the diphtheria death-rate being nearly twice that for England and Wales. The mortality from this disease in the rural districts was smaller in proportion to the population than in the urban districts; but the

fatality rate in the former was rather in excess of that in the latter, a difference which may be due, Dr. Thresh thinks, to the disease frequently assuming a more severe type in country districts than in towns or to trivial cases escaping observation. Possibly greater facility for medical and surgical assistance may, we would suggest, have had some effect. Dr. Thresh undertakes the bacteriological examination of any case of suspected diphtheria, and he supplies culture boxes to medical practitioners in the county, containing minute instructions for the inoculation of the tubes, &c. One instance—an instructive one—is mentioned by Dr. Thresh, in which an inoculation made on one day showed no diphtheria bacilli, while on the following day another inoculation from the same case yielded positive results. There is still much work to be done in Essex in the matter of isolation and provision for disinfection. During 1894 only 10·3 per cent. of notified cases of infectious disease in the urban districts were isolated in hospital; in the rural districts only 5·7 per cent. Only four districts in the county possess a modern form of disinfecting apparatus. In the latter connexion, however, we hear that Dr. Thresh has himself invented a disinfecting apparatus which possesses both efficient and economical qualifications. The reports of the district medical officers show, Dr. Thresh states, a steady and marked improvement; he regrets, however, as also do we, that in the rural districts only 16 out of 20 of the reports are printed, and in the urban only 11 out of 20. To take a medical officer of health's report as read, and evince no further interest in it, is certainly not the way to stimulate this officer to increased activity, but we fear that in some instances it is this very activity which it is the desire of the sanitary authority to check.

Oldham Urban Sanitary District.—In Mr. Charles H. Tattersall's first annual report on the sanitary condition of Oldham there is contained an instructive table, which we here reproduce, showing the incidence of small-pox around the Westhulme Hospital during the periods of its operations both in 1893 and 1894. In the former year, as our readers will probably remember from the valuable reports of Dr. James Niven, cases of acute small-pox were treated in the hospital in question; but in consequence of the increased incidence of the disease upon the surrounding districts arrangements were made for isolating future cases in a locality well remote from aggregations of population. The acute cases, however, during the last outbreak were brought back on becoming convalescent to the Westhulme Hospital. In the following table are given the number of untraced cases of small-pox and the percentage of houses affected upon the areas comprised within the several zones of the hospital, and it will be apparent that while in 1893 the percentage of houses invaded decreased with the distance from the hospital, no such incidence obtained in 1894:—

—	Total number of houses in 1888.	1893. Number of cases untraced in 1893.	1893. Percentage of houses affected.	1894. Number of untraced cases in 1894.	1894. Percentage of houses affected.
Within ¼-mile radius of Westhulme Hospital ...	170	10	5·8	0	0·00
Zone ¼ to ½ mile	1,660	62	3·7	3	0·18
Zone ½ to ¾ mile	2,450	40	1·6	4	0·16
Zone ¾ to 1 mile	5,000	46	0·9	10	0·20
Outside 1 mile radius ...	20,250	49	0·2	19	0·09

The total number of cases in 1894 was perhaps too small to place much reliance upon, but it will be observed that the different effects upon the surrounding population of aggregating on the one hand acute cases of the disease, and on the other the convalescent cases, are parallel with those demonstrated to have occurred over and over again by Mr. W. H. Power, F.R.S., in connexion with the operations of the Fulham Small-pox Hospital. The method adopted by Mr. Tattersall of calculating what he terms *untraced* cases only seem to us not unlikely to involve a fallacy, inasmuch as it assumes that, given a person who has two possible opportunities of being infected, one by personal contagion and the other by means of air-borne infection, the former is necessarily the more probable source of infection. The question is whether we are in a position to take up this standpoint, and whether we are justified in excluding from our calculations all such cases as might possibly have become personally affected. Anyhow, this method cannot be accused of any undue leniency towards aërial convection.

Halifax Urban Sanitary District.—Mr. D. Ainley, in presenting the current annual report, refers to the fact that Halifax has for many years ranked high amongst other towns in the matter of uncertified deaths, and with a view of throwing some light upon this subject he visited during the last five months of 1894 every case returned as uncertified. In some instances the non-certification appears to have been due to the attendance of an unqualified locum-tenens; in others, again, to the attendance of a midwife; and in yet others sudden death from chronic heart disease seems to have been the explanation. In some cases the medical practitioner arrived after death had taken place. Mr. Ainley considers that the small proportion of inquests held in Halifax in cases of uncertified deaths is the chief reason of the excess referred to. Mr. William Ackroyd, the public analyst for Halifax, condemns the practice of greening peas with sulphate of copper, and he insists that too much publicity cannot be given to the fact that French canned peas are thus coloured. The practice is illegal in France, but this fact does not appear to prevent its continuance. Both the samples analysed by Mr. Ackroyd in Halifax in 1894 contained sulphate of copper, one to the extent of fifteen grains per pound.

Hackney Urban Sanitary District.—In his annual report for 1894 Dr. King Warry furnishes a very interesting account of an outburst of diphtheria and infective sore-throat which occurred in a workshop in his district giving employment to some 160 persons. The attacks, 26 in number, were, with 3 exceptions, distributed among 43 adult females occupying a certain workroom. The disease was in the first instance imported from without, and having been introduced it appears to have spread through the agency of infected speaking-tubes and lavatory towels. The 3 earliest attacked were those who habitually made use of the speaking-tubes in question, and the tubes becoming infected were instrumental, in large part at least, in conveying the disease to employés subsequently using them. Of the remaining 3 cases, 1—an occupant of the room below the infected workshop—devoted part of her time to answering the speaking-tubes from the infected workshop; the other 2 were found upon inquiry to have used, contrary to regulations, the lavatory and towels belonging to the inmates of the infected workroom. It may be remarked that the workroom was not, in the sense of the Factory and Workshops Act, overcrowded, and that it was both well lighted and ventilated.

Durham County Sanitary District.—Dr. Eustace Hill, as in former years, prefaces the annual summary of the district medical officers' reports with a general report on the sanitary condition of the county generally. The total population of the administrative county, estimated to the middle of 1894, was 754,494, and in connexion with this estimate Dr. Hill states that some of the district medical officers in their annual reports for 1894 give simply the census population of 1891, while in other districts no recognised method of calculation has been adopted. The general death-rate for the administrative county was 17·2 per 1000—i.e., 2·8 per 1000 less than in the previous year. In the urban districts the rate was 16·9 and in the rural 17·7. The percentage of uncertified deaths to total deaths was 4·08, a rate which exceeded that for England and Wales by 1·58. This large proportion of uncertified deaths is, Dr. Hill remarks, entirely the result of medical practice by unqualified persons. The one serious blot upon the vital statistics of Durham county is the excessive typhoid fever rate; there were during 1894 259 deaths, the death-rate for the county—0·34 per 1000 of the population—being nearly double that for England and Wales. Several local outbreaks were apparently due to the consumption of specifically polluted water, and in the districts where notification is in force the cost of its operation amounted to £1 7*s.* 9*d.* per 1000 of the population. Only 8·8 per cent. of the notified cases were isolated in hospital during 1894, as compared with 11·7 per cent. for 1893. Under the Housing of the Working Classes Act good work has, Dr. Hill reports, been carried out, and he considers that Part III. of the Act might with advantage be brought into operation in some of the rural districts in the county. There is certainly room for at least some experiments under this part of the Act, whether in Durham or elsewhere. In the matter of scavenging we are

glad to learn that the Local Government Board has, after an inquiry, compelled the Durham rural sanitary authority to themselves undertake this work in most of the populous places in their district. As regards rivers pollution, the action of the County Council in taking proceedings against the urban sanitary authorities of Durham and Barnard Castle will be welcomed by all sanitary reformers.

Chester County Sanitary District.—The administrative county of Chester, for which Mr. Francis Vacher is medical officer of health, had in the middle of 1894 an estimated population of 555,211; the number of persons per acre was 9·98 in the municipal boroughs, 3·21 in the other urban districts, and 0·34 in the rural districts. The general death-rate in the municipal boroughs was 16·5, in the other urban districts 16·0, and in the rural districts 14·8 per 1000. The infantile mortality of the administrative county varied from 236 per 1000 births in Mottram to 26 in Higher Bebington. In referring to the subject of typhoid fever, Mr. Vacher draws attention to an interesting outbreak of the disease which occurred in the Northwich rural sanitary district, and which is reported upon by Mr. J. M. Fox, the district medical officer of health. The disease, in the first instance imported, appears to have spread through the agency of a mismanaged scavenging department; almost every person in any way engaged with the management of the scavenging became affected with the disease. There appears to have been a further complication in this instance in that the chief scavenger was a milk-seller. Mr. Vacher reports that outbreaks of rabies occurred in various parts of the county during the latter part of 1894, and in the borough of Hyde several children were bitten by rabid animals. The town council of this borough very generously sent those bitten to Paris under the supervision of the medical officer of health and the matron of the isolation hospital to undergo treatment at the Pasteur Institute. Mr. Sidebotham, medical officer of health of Hyde, furnishes in his current annual report a short account of his visit to Paris, which, as Mr. Vacher suggests, will be read with much interest by medical officers of health who have equally generous sanitary authorities to deal with. It may be remarked that the diagnosis of rabies in the dogs that bit the patients sent by the Hyde corporation was experimentally confirmed in Paris. Notification is not yet general in Cheshire, there being still four urban and one rural districts where the Act is not in force. The 555,000 persons comprising the population of Cheshire are still very badly off in the matter of isolation accommodation, but doubtless the valuable report which Mr. Vacher has made to the County Council upon the subject will have a stimulating effect. Mr. Vacher goes very thoroughly into all matters connected with the health of the county, and in connexion with each subject he sets forth the powers and responsibilities of the sanitary authority, and discusses the manner in which throughout the county these obligations are carried out. Under the heading of "Unsound Meat" Mr. Vacher observes that "either there is practically no trade in unsound meat &c. in this large county or the trade is not interfered with—the subject is only alluded to in four reports."

Kensington Urban Sanitary District.—Dr. Orme Dudfield's report for the year 1894 is, as usual, full of instructive matter, and will well repay reading by all interested in the sanitary progress of the metropolis. The report comprises some 260 pages of printed matter devoted to subjects connected not only with the parish of Kensington, but also with the metropolis as a whole. The estimated population of Kensington in the middle of 1894 was 167,300, and the ratable value in April of the same year £2,064,073. The population of the parish is to that of London as 1 to 26, and the ratable value as 1 to 16·4. The birth-rate of Kensington was but 21·9 per 1000, that for the town subdistrict being 25·7, and that for the Brompton district 12·6. The illegitimate birth-rate formed 5·8 per cent. of the total births, as compared with rates of 5·4, 4·9, and 4·9 in the preceding three years respectively. The general death-rate in the town subdistrict was 17·6 per 1000, that in Brompton being 11·0; the rate in the male sex was 19·3 and in the female sex 12·9. The total death-rate for the district, 15·7 per 1000, was 1·3 below the decennial average. Under the heading of small-pox Dr. Dudfield refers to a group of cases the first of which was not notified, owing, apparently, to its not being recognised until twenty days after its commencement. Cases such as these show well the limits which are experienced in practice to the utility of notification, and the difficulties of dealing with small-pox without the aid of vaccination and revaccination. As in former years, the report before us contains a most useful summary of the Metropolitan Asylums Board's annual reports; and we are, too, glad to see that the really admirable report of the women inspectors of Kensington, which we noticed in our columns at the time of its issue, is embodied in Dr. Dudfield's annual report of the district. Complaints occurred in Kensington during 1894 owing to a nuisance at a certain gasworks, caused apparently during the removal of spent lime from the gas purifiers. At Dr. Dudfield's suggestion some improvements were effected, but it appears that the nuisance cannot be entirely eliminated. In the matter of a temporary shelter Kensington is still classed with the metropolitan sanitary authorities who have failed to carry out the obligatory provisions of Section 61 of the Public Health (London) Act, 1891, although the subject has, to our knowledge, been frequently brought to the notice of the vestry. The medical officer of health states that during 1894 some sixty-four cases of infectious disease occurred in families occupying single rooms, and in each instance the room was closed for twenty-four hours. We are not told what became of the families during the period of their enforced absence from home.

Battersea Urban Sanitary District.—Dr. W. H. Kempster's report for 1894 should prove a highly interesting one to the sanitary authority for which it is prepared, as it contains a synopsis both of the report of the Royal Commission on the Metropolitan Water-supply and of the criticisms in it as prepared by the officers of the London County Council. In the conclusion of his summary Dr. Kempster observes: "It has always been a cherished article of faith in this country that the water of the river Thames is of unsurpassable quality for all domestic purposes. Nothing can be found in the report which in any way disturbs this conviction, and it may be assumed, as has always been urged in these reports, that the water supplied to London, if properly treated by the avoidance of pollution, ample storage ..... and efficient filtration, is all that can be desired." The existence of the "cherished article of faith" to which Dr. Kempster refers would not, perhaps, be admitted on all hands. There is also a capital summary in the report before us of the provisions of Mr. Asquith's Factory and Workshops Act. Very considerable improvement has been effected in Battersea during 1894 in the matter of public-house urinals as a result of a detailed inspection by a subcommittee of the sanitary authority; this action might be followed with profit in other metropolitan districts. Proceedings were taken in Battersea last year against the vendor of certain cheeses unfit for consumption, but the magistrate inflicted the costs only, and observed that a certain degree of decomposition was allowable in cheese. In, however, the case in question the cheeses were stated to have been in such a condition that the odour from them could be detected 200 yards away, and they were being sold for 2*d.* and 2½*d.* per pound. It seems that these cheeses had been stored in cellars which had been frequently inundated with Thames water, and this fact should certainly have precluded their sale.

Cardiff Urban Sanitary District.—From the view-point of public health the year 1894 will stand out prominently in the history of Cardiff as one in which marked advance was made. In the first place, it was in that year that the Cardiff Corporation Act became law, an Act which, besides containing several clauses bearing indirectly upon the public health, confers important powers upon the corporation in respect to dwelling-houses without proper water-supply, erection of dwellings on flat lands below high-water level, and the erection and maintenance of a crematorium for human remains. A fresh water-supply was introduced and a most complete fever hospital proceeded with. Dr. Edward Walford also, in his annual report, refers to the prospect of a public health laboratory being established at University College, Cardiff, in conjunction with the sanitary authority of that town, in which case facilities for bacteriological examination &c. would be afforded to the medical officer of health. Dr. Walford has been at much trouble to set forth clearly the birth- and death-rates for Cardiff, and he supplies some excellent tables in his report. From 1845 to 1894 the mean death-rates per 1000 for each ten years were as follows: 32·7, 26·7, 23·6, 20·0, and 20·7; the zymotic death-rates for the same periods were 9·8, 5·4, 3·9, 3·3, and 2·7.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

IN thirty-three of the largest English towns 6284 births and 4045 deaths were registered during the week ending

Aug. 24th. The annual rate of mortality in these towns, which had been 20·8 and 19·1 per 1000 in the two preceding weeks, rose again to 19·9 last week. In London the rate was 17·0 per 1000, while it averaged 22·0 in the thirty-two large provincial towns. The lowest rates in these towns were 11·8 in Croydon, 12·4 in Swansea, 12·9 in Plymouth, 15·5 in Bristol, and 15·9 in Leicester; the highest rates were 28·2 in Liverpool, 29·0 in Salford, 30·4 in Manchester, 33·2 in Hull, and 35·6 in Blackburn. The 4045 deaths included 977 which were referred to the principal zymotic diseases, against 1076 and 929 in the two preceding weeks; of these, 657 resulted from diarrhœa, 115 from measles, 64 from whooping-cough, 47 from diphtheria, 46 from scarlet fever, 40 from "fever" (principally enteric), and 8 from small-pox. In the large towns these diseases caused the lowest death-rates in Bristol, Croydon, Swansea, Halifax, and Plymouth; and the highest rates in Bolton, Wolverhampton, Salford, Hull, and Blackburn. The greatest mortality from measles occurred in West Ham, Salford, and Blackburn; from whooping-cough in Liverpool, Gateshead, Blackburn, and Birkenhead; and from diarrhœa in Sheffield, Derby, Wolverhampton, Preston, Salford, Bolton, and Hull. The mortality from scarlet fever and from "fever" showed no marked excess in any of the large towns. The 46 deaths from diphtheria included 24 in London and 3 in Liverpool. Six fatal cases of small-pox were registered in London and 2 in Oldham, but not one in any other of the thirty-three towns. There were 357 cases of small-pox under treatment in the Metropolitan Asylum Hospitals and in the Highgate Small-pox Hospital on Saturday last, the 24th inst., against 237, 273, and 336 at the end of the three preceding weeks; 65 new cases were admitted during the week, against 60, 54, and 79 in the three preceding weeks. The number of scarlet fever patients in the Metropolitan Asylum Hospitals and in the London Fever Hospital at the end of the week was 2507, against 2423, 2511, and 2529 on the three preceding Saturdays; 307 new cases were admitted during the week, against 247, 276, and 357 in the three preceding weeks. The deaths referred to diseases of the respiratory organs in London, which had been 159 and 137 in the two preceding weeks, rose again to 170 last week, and were 1 below the corrected average. The causes of 31, or 0·8 per cent., of the deaths in the thirty-three towns were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Bristol, Nottingham, Bradford, Hull, Newcastle, and in seventeen other smaller towns; the largest proportions of uncertified deaths were registered in Blackburn and in Birkenhead.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had been 17·6 and 16·6 per 1000 in the two preceding weeks, was again 16·6 during the week ending Aug. 24th, and was 3·3 per 1000 below the mean rate during the same period in the thirty-three large English towns. The rates in the eight Scotch towns ranged from 12·1 in Leith and 15·0 in Glasgow to 20·6 in Perth and 21·4 in Aberdeen. The 479 deaths in these towns included 42 which were referred to diarrhœa, 24 to whooping-cough, 8 to scarlet fever, 6 to to "fever," 2 to measles, 1 to diphtheria, and not one to small-pox. In all, 83 deaths resulted from these principal zymotic diseases, against 102 and 99 in the two preceding weeks. These 83 deaths were equal to an annual rate of 2·9 per 1000, which was 1·9 below the mean rate last week from the same diseases in the thirty-three large English towns. The fatal cases of diarrhœa, which had been 55, 68, and 60 in the three preceding weeks, further declined to 42 last week, of which 17 occurred in Glasgow, 10 in Edinburgh, and 9 in Dundee. The deaths referred to whooping-cough, which had been 12, 17, and 15 in the three preceding weeks, rose again to 24 last week, and included 6 in Glasgow, 5 in Dundee, and 4 in Aberdeen. The deaths from scarlet fever, which had increased from 3 to 7 in the three preceding weeks, further rose to 8 last week, of which 6 occurred in Glasgow. The fatal cases of "fever," which had been 5, 4, and 6 in the three preceding weeks, were again 6 last week, and of these 4 occurred in Glasgow. The deaths from measles, which had decreased from 11 to 7 in the four preceding weeks, further fell to 2 last week, and included 1 in Glasgow and 1 in Greenock. Only 1 death from diphtheria was recorded, being 3 less than in the preceding week, and that occurred in Dundee. The deaths referred to diseases of the respiratory organs in these towns, which had been 67 and 57 in the two preceding weeks, further declined to 55 last week, but exceeded by 4 the number in the corresponding week of last year. The causes of 31, or nearly 7 per cent., of the deaths in these eight towns last week were not certified.

HEALTH OF DUBLIN.

The death-rate in Dublin, which had been 22·2 and 24·0 per 1000 in the two preceding weeks, fell again to 20·9 during the week ending Aug. 24th. During the past eight weeks of the current quarter the death-rate in the city has averaged 23·3 per 1000, the rate during the same period being 20·1 in London and 16·5 in Edinburgh. The 140 deaths registered in Dublin during the week under notice showed a decline of 21 from the number in the preceding week, and included 11 which were referred to the principal zymotic diseases, against 27 and 21 in the two preceding weeks; of these, 9 resulted from diarrhœa, 1 from scarlet fever, 1 from whooping-cough, and not one from small-pox, measles, diphtheria, or "fever." These 11 deaths were equal to an annual rate of 1·6 per 1000, the zymotic death-rate during the same period being 3·0 in London and 0·8 in Edinburgh. The fatal cases of diarrhœa, which had been 17, 23, and 16 in the three preceding weeks, further fell to 9 last week. The mortality from whooping-cough corresponded with that recorded in the preceding week, while that from scarlet fever showed a decline. The 140 deaths in Dublin last week included 26 of infants under one year of age, and 32 of persons aged upwards of sixty years; the deaths both of infants and of elderly persons showing a decrease. Seven inquests were held and 8 deaths from violence were registered; and 45, or nearly a third, of the deaths occurred in public institutions. The causes of 10, or more than 7 per cent., of the deaths in the city last week were not certified.

THE SERVICES.

ARMY MEDICAL STAFF.

SURGEON-LIEUTENANT-COLONEL RANDOLPHE HARMAN, M.B., to be Brigade-Surgeon-Lieutenant-Colonel.

INDIA AND THE INDIAN MEDICAL SERVICES.

Surgeon-Captain H. B. Luard, at present officiating Agency Surgeon at Gilgit, is appointed to the permanent Medical Charge of the 45th Sikhs, and Surgeon-Captain G. H. Frost to the permanent Medical Charge of the 22nd Punjaub Infantry. Surgeon-Major R. J. Baker, M.D. (Bombay), Officiating Medical Officer of the 2nd Regiment, Central India Horse, and of the Poona Political Agency, is appointed to officiate as Medical Officer of the 1st Regiment, Central India Horse, and of the Western Malwa Political Agency, and during the absence on leave of Surgeon-Captain T. W. Shaw, M.B., or until further orders. Surgeon-Major A. E. J. Croly, F.R.C.S.I., is appointed to act as Medical Officer on the staff of his Excellency the Governor during the absence of Surgeon-Major H. Martin, M.B., or pending further orders.

NAVAL MEDICAL SERVICE.

The undermentioned surgeons have been promoted to the rank of Staff-Surgeon in Her Majesty's Fleet:—Edward John Morley, Hugh Winckworth Macnamara, Joseph Henry Whelan, M.D., Percy William Bassett-Smith, John Patrick Joseph Coolican, Edgar Ralph Dimsey, Joseph Reville McDonnell, M.D., Hamilton Meikle, and Herbert Canton.

The following appointments are announced:—Staff-Surgeon J. H. Whelan to the *Volage*. Surgeons: James L. Smith, M.B., to the *Blonde*; Frederick Fedarb, M.B., to Haslar Hospital; E. P. Mourilyan to the *Cormorant*; W. J. Maillard to the *Excellent*; F. Bradshaw to the *Plassy*; H. Elliott to the *Sphinx*; T. Austen to the *Wildfire*; G. Ley to Bermuda Hospital; H. S. Burniston to the *Actire*; J. H. Thomas to the *Pembroke*; G. Welch to the *Tyne*; and E. St. M. Nepean to the *Victory* (additional).

ARMY MEDICAL RESERVE OF OFFICERS.

Surgeon-Lieutenant Percival M. Yearsley, having vacated his Volunteer Medical appointment, ceases to be an Officer of the Army Medical Reserve of Officers.

VOLUNTEER CORPS.

Rifle: 1st Volunteer Battalion the Suffolk Regiment:

Surgeon-Lieutenant P. J. L. Morris resigns his commission. 2nd Volunteer Battalion the Suffolk Regiment: Samuel John James Kirby, M.D., to be Surgeon-Lieutenant. 1st (Cumberland) Volunteer Battalion the Border Regiment: Surgeon-Lieutenant S. Braithwaite resigns his commission. 1st Volunteer Battalion the Gordon Highlanders: Surgeon-Lieutenant G. M. Edmond, M.D., to be Surgeon-Captain.

THE ARMY REORGANISATION.

The Ministerial statement in the House of Lords in reference to the forthcoming reorganisation of the War Office is sufficiently clear and explicit as far as it goes. The new policy is not only based upon, but it is almost identical with, the recommendations of the Hartington Commission, except in one important particular—viz., that there will not be a Chief of the Staff appointed as recommended by that Commission. Lord Wolseley will for the next five years be the military head of the Queen's Army and exercise those functions which have hitherto been discharged by the Duke of Cambridge. There are, of course, a number of other important points embodied in the new scheme of reorganisation, but the foregoing really includes the main considerations of interest to the army and the nation.

DEATHS IN THE SERVICES.

Brigade-Surgeon-Lieutenant-Colonel J. F. Sargent, I.M.S., Madras Establishment, died at Hingoli on July 20th from abscess on the liver, aged fifty-one. He was appointed surgeon in 1873 and surgeon-major in 1878, and attained the rank of brigade-surgeon-lieutenant-colonel in 1890.

Brigade-Surgeon-Lieutenant-Colonel J. Riddick, A.M.S., died in India on July 27th. He joined the Army in 1857, became surgeon in 1873, surgeon-major in 1879, and brigade-surgeon-lieutenant-colonel in 1894; Afghan War, 1880, (medal).

THE WAZIRISTAN HONOURS.

Surgeon-Colonel Lionel Dixon Spencer, I.M.S., is to be Ordinary Member of the Military Division of the Third Class, or Companion, of the Most Honourable Order of the Bath, and Brigade-Surgeon-Lieutenant-Colonel George McBride Davis, I.M.S., is to be a Companion of the Distinguished Service Order.

The War Office have instructed Messrs. Paterson and Cooper to proceed with the erection at Netley Hospital of the Hermite sanitation plant, the cost of which has been provided for in this year's Parliamentary estimates.

Correspondence.

"Audi alteram partem."

COUNTRY PRACTITIONERS AND LOCUM-TENENTS.

To the Editors of THE LANCET.

SIRS,—Kindly allow me space for a few remarks about the troubles, losses, &c. country practitioners experience from individuals they engage to take charge of their practices whilst taking the much-needed holidays. My experiences have been very painful, but, I believe, not worse than those of other general practitioners. Out of seven (all except Nos. 1 and 7 were supplied by agents) No. 1 alone gave satisfaction. No. 3 lamed my horse by jumping it over fences or by other work it was not fitted for. No. 5 took fright at a case of small-pox and bolted after helping himself to money he was not entitled to. No. 6 was so drunken that I had to give up my holiday at an hour's notice to get rid of him just before he had delirium tremens. In fact, all except No. 1 acted as if on a holiday or spree, doing as little as possible and never booking that little legibly or fully, neglecting patients, and during such few hours they thought fit to stay in my house making themselves as untidy, slovenly, and disagreeable as possible. These gentlemen demand three guineas a week, board, lodging, and all expenses. Having got all immediately after the employer's return, there are no means of calling them to account, as their delinquencies are only discovered later on, after their being paid and dismissed. I suggest that two recent references should be required from each applicant, and that even if he is recommended by an agency. If honest replies are sent, then the necessary holiday can be taken without the losses and annoyances I have written about. I quote the following from a letter from a country practitioner whom, although I have never met him, I am glad to know I warned against employing as locum-tenent one of the most ungentlemanly persons that I ever met with. He writes as follows: "I deeply sympathise with your having been served the same way as myself by such worthless, indifferent, and incompetent men going about the country. ..... I am determined before I engage another man to find out his antecedents. ..... If employers were more honest and truthful much heart-burning would be saved." I trust general practitioners will take the advice given by my correspondent, and not only decline to recommend but expose anyone who does not carry out his duties and behave himself as a gentleman ought to do whilst in their employ.

I am, Sirs, yours faithfully,

HENRY PILKINGTON, M.R.C.S. &c.

Ormskirk, Lancs, Aug. 26th, 1895.

THE PAYMENT OF MEDICAL WITNESSES.

To the Editors of THE LANCET.

SIRS,—My partner and I had to attend the last Assizes held at Lincoln as medical witnesses in a manslaughter case. On each of three days we had to leave home at 9.20 A.M. On two of the days the earliest time we could possibly get back was 5.20 P.M., and on the third day 1 P.M. We were paid one guinea per diem each, and an allowance of 12*s.* 10*d.* each for expenses—a total of £3 15*s.* 10*d.* for an enforced absence from our practice of nineteen hours and forty minutes. I am writing you this simple statement hoping that you, or some of the numerous readers of THE LANCET, will suggest some means whereby united action can be taken, in order that the present state of things may be altered, so that medical witnesses in similar cases shall be paid reasonable fees for their loss of time and trouble.

I am, Sirs, yours faithfully,

Gainsborough, Aug. 22nd, 1895. JOHN E. S. PASSMORE.

*** Our correspondent will note that the subject-matter of his letter is dealt with in a leading article in our present issue.—ED. L.

"AN IMPOSTOR."

To the Editors of THE LANCET.

SIRS,—The letter you publish in THE LANCET of Aug. 24th from Dr. F. W. Saunders has interested me, for I, too, was favoured the other day from the Goswell-road. In this case the writer signs himself Arthur E. Ronald, which is the name of an old friend of mine who was at Cambridge and St. Thomas's Hospital with me. The letter asks for an immediate loan and promises subsequent explanations. Certain circumstances and signs, however, made me doubt the genuineness of the communication and so save myself from the imposition. A friend of mine writes to me from Cambridge and tells me that a short time ago he actually fell a victim to some (probably the same) rascal, who wrote to him from an address in the Gray's-inn-road, signing himself George Anson, and asking for an immediate loan. In these two instances the four persons written to and from were intimate friends both at Cambridge and at Thomas's Hospital. Drs. Ronald and Anson are at present in practice abroad, the former in Melbourne and the latter in New Zealand. The letters show that their whereabouts were well known to the writer.

I am, Sirs, yours faithfully,

EDGAR TREVITHICK, M.D. Cantab.

Cheltenham, Aug. 23rd, 1895.

"THE TREATMENT OF ACUTE RHEUMATIC ENDOCARDITIS."

To the Editors of THE LANCET.

SIRS,—In THE LANCET of Aug. 17th there is a valuable contribution to this important question by Dr. Caton of Liverpool. I should not have been prompted by the general tenour of his paper to trouble you with any words from me on the subject, but I am tempted to accede to his request when he so pointedly says, "I am anxious to know what the

experience of others has been in regard to the very grave disease in question, and to hear of alternative or superior plans of treatment. The one thing I am specially anxious about is that members of the profession who have the opportunity of observing cases of acute endocarditis should give this method a fair trial during the early stage of the malady." In the first place, as regards the occurrence of acute endocarditis in the course of, or as a sequel to, a more or less acute rheumatic attack, I doubt if there is any very general recognition of the condition apart from the existence of murmur, and even when murmur is present it is of course a question whether it is or is not due to inflammatory changes in the endocardium. This question, along with some others, I dealt with ten or eleven years ago in a little volume entitled "Investigations into some Morbid Cardiac Conditions," and I do not enter into it now. Most of us will be prepared to accept Dr. Caton's opinion of his own cases as the expression of a reasonable diagnosis. At page 144 of the book referred to I mention that I had treated three cases of what I believed to be active endocarditis by blistering the præcordia and giving iodide of potassium internally, and that the result in these cases was different from others I had not so treated in that they recovered. Since that book was published I have been confirmed in my then expressed opinion that active endocarditis was capable of being diagnosed even when superadded to a previously damaged endocardium; and eleven years of additional experience have only tended to establish in my mind the value of the treatment which Dr. Caton has advocated.—I am, Sirs, yours truly,

WM. RUSSELL,
Assistant Physician, Royal Infirmary.

Edinburgh, Aug. 26th, 1895.

DIPHTHERIA AND ITS CAUSATION.

To the Editors of THE LANCET.

SIRS,—The two chief views put forward to account for the various outbreaks of diphtheria that occur from time to time are (1) defective sanitation, and (2) the aggregation of children in schools. This latter has been specially put forward by Mr. Shirley Murphy, medical officer of health to the London County Council; but with regard to school attendance Mr. Biddle has shown that, though the number of cases increases (as Mr. Shirley Murphy asserts) immediately after the holidays, they decrease again as the term drags on its course. At first sight it appears as if these two ideas are utterly irreconcilable, but I cannot help thinking both may possibly be right. It must be considered that there is no flushing of the school drains during the holidays, and that they only get properly scoured and disinfected after the children meet. I dare say others besides myself have noticed the prevalence of continued dry weather prior to an outbreak of diphtheria, and in this case no doubt deficient flushing of drains is an important factor.—I am, Sirs, yours faithfully,

Surbiton, Aug. 26th, 1895. F. P. ATKINSON.

THE ANTISEPTIC SYSTEM.

To the Editors of THE LANCET.

SIRS,—Now that the benefits derived from antiseptic measures in practice are widely known and accepted it is desirable that a word of caution be uttered as to how far their uses are sometimes adopted unnecessarily and unjustifiably. Anyone who has followed the progress of the treatment of disease will admit that such measures have played a prominent part in the great forces of evolution, which for better or worse are inevitable. I have before me two instances taken from THE LANCET which exemplify the points above mentioned. 1. In THE LANCET of March 2nd, 1895, the following case is recorded:—A child aged three years was accidentally subjected to carbolic acid treatment, the acid being rubbed into the scalp for three minutes, being mistaken for the ointment, and producing unconsciousness in five minutes, followed by coma in one hour, which lasted five hours. 2. In THE LANCET of June 1st, 1895, the following cases are recorded:—(*a*) A boy aged fifteen years on Aug. 24th, 1894, was being prepared for an operation to take place in the evening. At 12 P.M. a carbolic compress was applied over the right thigh. At 2.30 A.M. the patient was found to be comatose. At 10 A.M. on the 28th he was still comatose. At 10.30 he partially regained his consciousness. On Sept. 1st he had recovered. On Sept. 3rd he was again subjected to a compress, an operation being in view; but, again suffering from the effects of the drug, the operation was postponed. (*b*) A boy aged six years and a half on Jan. 30th, 1895, at 12.20 P.M., had a carbolic compress (1 in 20) applied over the skin in the right iliac fossa. At 1.30 P.M. the child was noticed to groan and shortly afterwards found to be comatose. At 6 P.M. the child was recovering consciousness. At 7.30 P.M. consciousness returned, and the history states that he was a few days in regaining his original health. These last two cases, recorded in THE LANCET of June 1st, 1895, are instructive in pointing out the unjustifiable uses of the antiseptic system in subjecting patients of the ages of fifteen and six years respectively to the action of a common poison for two hours and one hour, when all that was necessary from an aseptic point of view could have been done five minutes prior to the operation by ordinary washing with soap and water, to be followed by bathing with some antiseptic solution. I believe there is no record of any case known where infection has taken place through a healthy and unbroken skin, and therefore it is reasonable to infer that any extraneous matter upon the skin likely to interfere with the success of the operation would not be found to penetrate beyond the epidermis. The writer talks about "peculiar susceptibility" of patients. There seems to be nothing peculiar, except that of surprise at not hearing of more such cases. And if by the use of the carbolic compress the full effects are sometimes reached, what relation will a milder dose bear to the state of anæsthesia? The unnecessary application of the "system" is also carried out in midwifery practice.

I am, Sirs, yours faithfully,

Chiddingfold, Aug. 24th, 1895. A. P. WALTERS.

"UNQUALIFIED PRACTICE."

To the Editors of THE LANCET.

SIRS,—I have observed in the pages of THE LANCET several letters regarding unqualified assistants. As this subject will yet, I believe, be taken up and dealt with by the General Medical Council, there is an aspect of the question which I hope that learned body will not overlook—viz., the advantages of an unqualified assistantship to the student of to-day who is the practitioner of to-morrow. Is not one of the defects of modern medical education that it is too theoretical? In this it does not excel or come up to the old apprenticeship days. A student does not gain at lectures or even in the hospital that experience so necessary to the general practitioner, and during his long holidays a medical student could not do better than gain a practical knowledge of drugs by dispensing, attend simple cases in surgery, and attend cases of labour. If he is trusted to do these in dispensary practice at college, why should he not be allowed to do so, perhaps to have a comfortable home during holidays while his resources are limited, or to assist some old practitioner whose means forbid him employing a fully qualified medical man? Of course, it is undoubtedly abused, but that is no argument against the practice.

I am, Sirs, yours truly,

Edinburgh, Aug. 27th, 1895. JAS. ANDERSON.

"THE PARASITE OF MALARIA AND MALARIAL FEVER."

To the Editors of THE LANCET.

SIRS,—In THE LANCET of July 6th you publish an article by Dr. G. Thin on the above subject, supplying to some extent the much wanted detailed information as to the methods of staining that organism. There are one or two points (which may be of interest) not mentioned: 1. In using eosine and methylene blue for its demonstration the test of a sufficiently well-stained preparation, to be of value as negative evidence, is that the eosinophil corpuscles must show as blue corpuscles with the eosinophil granules as sharply defined red without a tinge of purple. If they are blue the plasmodium will also be stained blue, but if the eosinophil granules are in the least purple the eosin in the red corpuscles will be to some extent replaced by methylene blue, and the plasmodium will be difficult to distinguish. 2. For the preparation of the vessels in the brain and other organs a simple, though rough, method is to take a small portion of the cortex and crush it between two cover glasses. These brain "squashes" can be fixed by heat or any other method and stained with

cosine and methylene blue and mounted in balsam. Most of the vessels still contain blood, and the results are at least quite equal to the plates in Dr. Thin's paper or in the Italian works, although there may be some distortion of the red corpuscles. 3. Anyone in doubt as to the existence of the bodies will find their presence most easily demonstrated in fatal cases, not necessarily in the most pigmented organ, the spleen, as that, though usually containing many intra-corpuscular bodies, may, although deeply pigmented (probably from the accumulation of pigment formed in other parts of the body), contain none, as in a recent case here where intra-corpuscular bodies were numerous in the cerebral vessels and none were found in the spleen, though this contained much recent pigment. As a rule, however, the spleen is the safest organ in which to look for them, unless the brain be pigmented. 4. It is much to be regretted that no certain and easy method of staining has yet been devised. The aqueous methylene blue has to be quite fresh, the mixed solution of eosine and methylene blue does not keep, and with Löffler's solution the eosine is too rapidly replaced. 5. Without staining too many mistakes occur. Vacuoles are easily taken for the plasmodium, and in much that has been written too little has been made of this liability to error. I am convinced that till some more certain but quick and simple method is found we shall have little help from the discovery of these bodies in differentiating the heterogeneous mass of tropical fevers.—I am, Sirs, yours faithfully,

C. W. DANIELS, M.B. Cantab.,
Pathologist to the Georgetown Hospital,
Georgetown, Aug. 8th, 1895. British Guiana.

"THE EXPLOSION AT THE MILE-END INFIRMARY."

To the Editors of THE LANCET.

SIRS,—Having supplied the press with a veracious account of the recent gas explosion in the grounds of this infirmary I cannot be responsible for the extravagant version published by some of the daily prints, upon which your annotation last week was, no doubt, based. The devastation described by those journals, I am happy to say, existed only in the mind of the contributor, and there was no wreckage of wards, no upheaval of corridors, no breaking of glass, and no panic among the patients whatever, and for the simple reason that the accident occurred in connexion with the gas company's mains quite outside the buildings. It is an unpleasant task to have to deprive the reading public of even a moderately sensational paragraph, but I feel bound, after the lecture you have read the management of this place, to repudiate the inference that there was any lack of supervision on the part of the staff. Without assuming an undue sense of security, I would venture to think that in an institution of this kind, which is manned the twenty-four hours round by a numerous staff of officials, such accidents as the overlooking of a breakdown in the gas supply are almost impossible for but a very short length of time. The possibility in future will, so far as we are concerned, be still further diminished by the adoption by our board of electric lighting throughout the infirmary which is in process of being carried out.

I am, Sirs, yours obediently,

A. H. ROBINSON,
Aug. 27th, 1895. Medical Superintendent.

VOLUNTEER MEDICAL SERVICE.

To the Editors of THE LANCET.

SIRS,—I beg to inform the Volunteer Medical Service through the columns of THE LANCET that my corps has been enabled to obtain permission, after representation to that effect, for regimental stretcher-bearers to wear a permanent badge on their right arm, showing their efficiency in their special instruction. The Geneva Cross hitherto worn has rightly been withdrawn, as regimental stretcher-bearers, being actually fighting men, could not adopt that badge without contravening the provisions of the Geneva Convention. Knowing that the Geneva Cross was much valued and that a badge would be appreciated, and that without some such mark the ambulance work in all regiments would languish and suffer, I made a special representation of the case to the authorities at the War Office, which was strongly backed by my colonel and the principal medical officer of the Home District. The result has been that last week we received an official letter stating that His Royal Highness the Commander-in-Chief had granted the request and that for the future all regimental stretcher-bearers might wear as a permanent badge of their efficiency a distinctive mark on their right arm, a sketch of which was enclosed. This badge consists of a circle of red round a ground of the same colour as the tunic, having the letters S.B. embroidered on it in red and blue, and in due course it will be adopted and ordered. I trust that this willing and ready desire to meet the wishes of the Volunteer Medical Service will prove satisfactory to all; and in concluding I desire to express my opinion that the new badge will in no way interfere with the adoption by all regimental stretcher-bearers, when actually employed as such, of the authorised brassard hitherto worn on the left forearm. I willingly express my thanks to Colonel Josselyn and Surgeon-Colonel Churchill, A.M.S., for the ready assistance which they have given to my application.

I am, Sirs, your obedient servant,

M. BAINES, V.D., M.D.
Surgeon-Lieutenant-Colonel 1st Middlesex Vol., R.E.
Headquarters, College-street, Chelsea, S.W., Aug. 25th, 1895.

"SPECIALISM IN MEDICINE."

To the Editors of THE LANCET.

SIRS,—Your correspondent "A Specialist" entirely misreads me when he supposes that I find fault with specialists for overcharging. I have always held that the amount of a fee honestly earned is a matter which rests entirely with the medical man and his patient. What I do complain of is that among certain specialists the fee is too often dishonestly earned. For what name other than dishonesty can be given to the growing practice, almost confined, I believe, to specialists, of subjecting patients after the most trivial operations to after-treatment considered totally unnecessary in the case of hospital patients, and of investing these minor operative procedures with all the gravity associated with a major operation, for the sole object of enabling a larger fee to be asked? To draw attention to this practice was the object of my letter published in THE LANCET of Aug. 17th. In it I took pains to illustrate the charge I laid by cases in point. From the fact that he ignores this I can only assume that "A Specialist" has become so accustomed to viewing life through special spectacles that he fails to recognise as dishonest acts which the ordinary man does not hesitate to pronounce such. If he reflects a moment, too, he will see that the practice in question is equally hard upon the general practitioner as upon the unfortunate patient—e.g., it has happened to myself, and, as I am aware, to many others, that patients for whom I have arranged to remove adenoids have been persuaded by friends to go to London to "see a specialist." On their return I have either been reproached for having represented the operation as being so very trivial, "scarcely more severe than the removal of tonsils," whereas they had been confined to a private hospital for a week or a fortnight with a nurse in attendance; or it has been assumed, and naturally, that I had not recognised the gravity of the case and that much more had been done in the way of operative treatment than I had intended to do. To the hackneyed arguments in favour of the multiplication of specialties which "A Specialist" puts forward I refer him for my answer to the clear and forcible remarks on the subject which have from time to time appeared in the leading articles of THE LANCET.

I am, Sirs, yours faithfully,

Aug. 27th, 1895. A GENERAL PRACTITIONER.

"OVER-OPERATING IN GYNÆCOLOGY."

To the Editors of THE LANCET.

SIRS,—I venture to trouble you on some aspects of the question of the so-called "over-operating" in gynæcology. What is "over-operating"? Does it mean the wilful undertaking of operations that the operator knows full well in his heart can be of no service whatever to the patient—operations undertaken solely for the purpose of putting money in the purse of the operator? If so, then such "over-operating" at once excites indignation and condemnation at the hands of all right-thinking men, of all honest men, and it is immaterial what the operator may call himself—obstetric physician, surgeon, gynæcological surgeon, or anything else. It is the

act that is wrong; the act is indeed a crime, and whoever is guilty of it deserves to be branded as a criminal. But perhaps this is not the meaning of "over-operating." It may mean operations undertaken by those who are in a position to act as pioneers, each in his own department. In this sense it merely means operations undertaken in the light of present knowledge that would formerly have been regarded as impossible. If it means this those who use the term mean that we should be content with the state of things at some particular moment and refuse to recognise that there may be more things in heaven and earth than are dreamt of in our philosophy. Anything that is unfamiliar and untried must be wrong; those who try to advance are guilty of "over-operating." In this connexion it is well to take example by the steam-engine, and to observe that what seemed a very high rate of speed to our grandfathers would seem a slow pace to those who travelled by either of the expresses in the recent "race to Aberdeen." The truth is that Sir W. Priestley and those who go with him are obviously opposed to the obstetric physician of the present day operating at all. To take an illustration from Æsop's Fables, they may be divided into: 1. The foxes who have had the misfortune to be born without tails—the obstetric physicians who have never done abdominal operations and never wish to see their successors do so. 2. Those who have had tails, and very fine ones too, but who for reasons of their own have deprived themselves of these useful appendages—the obstetric physician who has given up operating. 3. Those who, whether they would or not, have been deprived of their tails—those obstetric physicians who have done abdominal operations, but have, for one reason or another, been unable to continue performing them. The suggestion that an operator, because he may have removed a suppurating ovarian tumour, is therefore unable safely to attend a midwifery case will not bear a moment's consideration in face of the abundant evidence to the contrary; nor, indeed, can the obstetric physician who does not operate attend midwifery with any cleaner conscience or cleaner hands. For even the obstetric physicians who do not operate practise gynæcology, and in so doing contaminate their hands with all kinds of foul vaginal discharges, such as those in cases of cancer of the uterus; they also see and examine cases of puerperal fever in consultation. If they were consistent they would give up gynæcology altogether, and attend one midwifery case per annum, remaining the other eleven months in quarantine. Even then they might happen to meet and shake hands with an operating obstetric physician or surgeon on their way to their annual case—and so be undone. The whole thing is, however, ridiculous in the face of the teaching of experience; both obstetric physicians who do not operate and those who do are equally dependent on the efficacy of antiseptics, and the safety of their patients depends on the thoroughness with which they understand and perform personal disinfection. As it is, both in the obstetric world and in the animal kingdom, the majority of foxes have not lost their tails and do not intend to part with them, Sir W. Priestley and Mr. Malcolm notwithstanding.

I am, Sirs, yours truly,

Aug. 23rd. VULPES NON EQUIDEM SINE CAUDA.

BIRMINGHAM.

(FROM OUR OWN CORRESPONDENT.)

Is a Crematorium desirable?

THE question of the disposal of the dead is gradually making itself felt by the large populations in our midst. The aggregation in centres and the overcrowding in many places force attention to the dangers which arise and the difficulty in finding an adequate remedy. One deduction without doubt opens a way of relief for the disposal of the dead in a manner from which the living will not suffer. This is to be found in cremation. The results of the process at Woking and Manchester encourage the advocates of the system to believe that additional facilities for carrying it out would lead to progress in the cause. The vast number of inhabitants in this midland area have no provision at present for furthering their views in this direction in a practical form. Sanitarians and those interested in the subject will do well in calling attention to it and in endeavouring to make known the evils of interment in thickly populated places.

Opium and the Pharmacy Act.

A woman aged forty-eight years, whose death was the subject of an inquiry at the coroner's court, seems to have been in the habit of taking laudanum, which was obtained with great ease. An unqualified druggist admitted selling three drachms of the tincture of opium for twopence, and three hours afterwards another fourpennyworth to the same woman. This vicious habit of opium-taking is very common among the poor, the cheapness and readiness with which it can be obtained favouring the spread of the vice, and tending to draw more victims under its pernicious influence. Another instance of opium poisoning was heard the same day in a different court. An actor was charged before the magistrates with attempting to commit suicide. A large dose of laudanum was admitted to have been taken with the intention of destroying life. Prompt action on the part of the hotel landlord frustrated the design taking effect. The culprit was dismissed with a caution.

Ear and Throat Hospital.

An important era in this institution has been inaugurated by the opening of an in-patient department on the 12th inst. under the presidency of Lord Leigh. The hospital, which has been established for fifty years, has often felt the need of beds for the more immediate supervision and treatment of patients. The fact of 18,000 patients having been treated in the year 1894 is sufficient evidence of the necessity for some internal arrangements. At present there is space for thirty beds, though it is proposed to occupy only ten of these until the funds of the hospital warrant a greater number.

The Corbett Hospital, Stourbridge.

The annual meeting was held on the 26th inst. under the presidency of Viscount Cobham. The report showed that not only had the eighteen beds been filled, but that there had been great demand for additional room. Mr. Corbett again very generously had made provision for children to be admitted, giving £1000 for endowment and £500 for the necessary addition to ensure this. The total ordinary income for the year amounted to £980 16*s.* 2*d.*, and the expenditure to £1100.

Aston Flower Mission.

This is a flourishing little society for the sale of flowers given to the mission to purchase letters for the hospitals and to distribute these among the deserving poor. An interest is thus created in the sick, occupation is found, and human sympathies are widened and extended in a number of good ways.

Aug 27th.

LIVERPOOL.

(FROM OUR OWN CORRESPONDENT.)

The Epidemic of Homicide and Suicide.

THE terrible frequency of crimes of violence ending fatally and of suicides which has been prevalent all over the country has been very marked in this city and neighbourhood. One very sad case, in which the child of a local practitioner was the victim and a medical assistant the alleged perpetrator, has been already noticed in THE LANCET. As the accused has been committed for trial it would be improper to comment upon the case beyond stating the fact that in this, as in most other cases, intemperance plays a very prominent part. It would be well if the well-meant efforts of temperance reformers could be so regulated that those who are in danger of becoming drunkards could be induced to be total abstainers; but it is necessary to differentiate. There are many who, though not total abstainers, are no more likely to become drunkards than total abstainers; they can use this world and the good things in it without abusing either; and it is a melancholy fact well known to medical practitioners that men and women who have been total abstainers up to middle life have become confirmed drunkards.

Teetotal Ships.

For more than half a century Liverpool, in common with other sea-ports, has made experiments as to the value of enforced total abstinence on a very extensive scale. Of the total number of ships leaving the Mersey the crews of the large majority have been required to sign articles "No grog allowed," and with few exceptions this rule has been rigidly

enforced. While it is gratifying to note that many seafaring men have been induced to become strictly sober, it must not be forgotten that "no grog allowed" is applied to the forecastle and not to the cabin. Poor Jack, who had to do all the pulling and hauling, and to endure the hardship of laying out on the yard reefing top-sails in snow, frost, squalls, and rain, was compelled to be a total abstainer; the captain and officers, who had none of these duties to perform, but whose sobriety was of even greater consequence, might drink grog *ad lib.* This enforced sobriety does not prevent sailors from rushing to the public-house as soon as they land, and it becomes a very grave question whether a reasonable amount of stimulant on board ship might not tend to promote sobriety ashore.

Coffee as a Stimulant and Article of Diet.

Alluding to the annotation in the last issue of THE LANCET on "A German School of Cookery," it is to be lamented that good, wholesome, pure coffee, free from chicory, is not brought to the notice of the public by advertisers as much as tea, cocoa, or chocolate is. Those who have travelled on the Continent know that a cup of excellent coffee can be obtained at an almost trifling cost, and know what an excellent stimulant it is. Why should this be? and why, on the other hand, should coffee, even in the homes of the rich in this country, be too often wholly undrinkable? That there is no difficulty about the making of good coffee is proved by the fact that the best is made in the simplest apparatus—a plain earthenware jug. This, with boiling water and a reasonable amount of berries freshly ground, is all that is required. Both the demand and supply of coffee in this country are diminishing, but a more extended knowledge of its value as a stimulant and as an article of diet would ensure its increased use and in due time its reduced price.

Greater Liverpool.

The extension of the city boundaries is now all but an accomplished fact. Many advantages will be gained, not the least of which will be a more accurate computation of the real population of the city and a fairer estimate of its death ratio. When the healthy suburbs, in which so many of the citizens of Liverpool actually live, are comprised it is more than probable that the mortality of Liverpool will compare favourably with that of any large town or city.

Aug. 27th.

SCOTLAND.

(FROM OUR OWN CORRESPONDENTS.)

Meeting of the British Dental Association in Edinburgh.

THE annual general meeting of the British Dental Association is to be held in Edinburgh on Thursday, Friday, and Saturday of this week. Rooms have been obtained for the meeting in the University. Demonstrations are to be given both there and in the Dental Hospital and School, Chambers-street. Mr. W. Bowman Macleod of Edinburgh is the President-elect. As is usual at such gatherings, the social element has not been omitted. On Wednesday night there is to be a smoking concert in the Waterloo Hotel, on Monday the Lord Provost and magistrates will give a reception at the City Chambers, on Friday the annual dinner of the Association is to be held, and Mrs. Bowman Macleod will give a ladies' reception in the evening at the Waterloo Hotel.

Bazaar for St. Andrews University Students' Union.

A bazaar to pay off the debt on the St. Andrews University Students' Union was held on Thursday, Friday, and Saturday of last week. On Thursday it was opened by the Marquis of Bute, on Friday by Lady Helen Monroe Ferguson, and on Saturday by Principal Donaldson. The result has been most satisfactory, for the takings for the three days amounted to £1370, which is sufficient to pay off the debt, leave a sum for endowment, and a small sum as the nucleus of a fund for a union and reading room for the lady students.

University of Glasgow.

Professor Joseph Coats and Dr. L. R. Sutherland are to conduct during the month of September a post-graduate course for practical instruction in the methods of pathological research. A similar course conducted last year attracted a large number of the younger graduates, who highly appreciated the thorough and practical method of the class. At Queen Margaret College the following lecturers have been appointed: Dr. Charles Workman to the lectureship in Pathology and Mr. J. Hogarth Pringle to the lectureship in Surgery. The instruction of the women students in clinical medicine is to be undertaken by Dr. J. Lindsay Steven, physician to the Royal Infirmary, and he is to be assisted by Dr. W. K. Hunter, who has recently been appointed extra physician to the dispensary of the infirmary.

Glasgow Maternity Hospital.

Two vacancies will shortly occur in the staff of this hospital, Professor Murdoch Cameron retiring from the position of Obstetric Physician and Dr. Malcolm Black from that of Assistant Obstetric Physician. The new appointments are not to be made until November, yet several candidates are already in the field.

University College, Dundee.

Dr. John Yule Mackay, Professor of Anatomy, has been requested to act in conjunction with the chairman of the council in discharge of the duties of the Principalship during the present vacancy.

Aberdeen University: Death of Mr. Charles Mitchell, LL.D.

A great gloom has been cast over the University and the city by the announcement of the death, on Thursday, Aug. 22nd, of Mr. Charles Mitchell, LL.D., the greatest benefactor of the University in modern times. In a month he was to have been the central figure at a great inaugural celebration, at which the magnificent buildings, so closely associated with his name, were to have been opened. Mr. Mitchell, who was in his seventy-fifth year, was a native of Aberdeen, and began his professional life as an apprentice to an Aberdeen firm of engineers. He studied chemistry at Aberdeen University, and had the distinction of being first prizeman in 1840. He left Aberdeen in 1842, but after the lapse of half a century and more, during which time he had amassed a large fortune and pushed his way to the head of the famous Newcastle firm known as Sir W. G. Armstrong, Mitchell, and Company, he still retained the warmest interest in and affection for the city and University that started him in his prosperous and useful career. The glorious Mitchell Tower and splendid Graduation Hall and Students' Union are a standing memorial to his wisdom and generosity. It may almost be said that but for his munificence and the deep interest he showed in the work, the great extension scheme at Marischal College would have come to a deadlock. I copy from the *Free Press* the account of his bequests to the University: "When the Extension Movement was initiated in 1891 Mr. Mitchell immediately responded with a donation of £1000. In the following year he supplemented this by an offer to erect a Graduation Hall and Students' Union, estimated to cost together £13,000. This generous offer, handsome in itself, has since been supplemented by Mr. Mitchell by the provision of a grand organ; by filling (at a cost of £2500) the large window in the Graduation Hall (to be known as the Historical Window) and ten side windows with stained glass commemorative of donors to the University (both King's and Marischal Colleges), the leading principals and professors, and the most distinguished graduates; by laying an oak floor in the old hall of Marischal College (now to be constituted an art gallery); and by supplying the requisite furnishings of the Students' Union. In addition to all this Mr. Mitchell undertook the cost of the heightening of the tower of Marischal College, according to the design of Mr. A. Marshall Mackenzie, A.R.S.A., the architect—a cost estimated at £7000. Quite recently Mr. Mitchell undertook to further complete the artistic effect of the summit of the tower by adding four small turrets, by putting in a clock and bell (estimated to cost £300), and by filling the bay windows of the old portion of the tower with stained glass. Mr. Mitchell also gave £1200 for the purchase of a house in Queen-street to assist in the scheme of extension. Still more recently, we understand, he intimated his intention of contributing £6000 towards the erection of the south wing of the extension scheme, and of the terminal towers of the south and north wings, on condition of the other £10,000 required being subscribed, and even made provision for this being carried out in the event of his decease." He must in all have contributed something like £31,000 to the scheme, and his invaluable assistance and advice enabled many difficulties to be surmounted. In February, 1893, the Senators conferred on him the honorary degree of LL.D., and the tower and Graduation Hall are to be named after him.

In the altered circumstances the arrangements made for the great celebration next month now no longer hold. Immediately on receipt of the sad news Sir William Geddes, the Principal, telegraphed to Mr. Mitchell's son: "Deeply concerned at most sad tidings. Aberdeen University mourns her generous and noble-hearted son. We beg to offer heartfelt sympathy." The Celebration Committee met and came to the following resolution: "That, in consequence of the sudden and lamented death of Dr. Charles Mitchell of Newcastle, who has been the chief promoter of the extension scheme, and in whose honour the proposed autumn celebration was chiefly designed, the Ceremonial Committee suspends its deliberations until such time as the wish of his family and the resolutions of the Court and Senatus consequent on the altered circumstances are ascertained." A meeting of the University Court is called for Tuesday next to consider the course of action to be taken in reference to the inaugural celebration. Principal Sir William Geddes, the Lord Provost, and Professor Niven travelled through to be present at the funeral service in St. George's, Jesmond, on Monday, Aug. 26th, and a memorial service was held in the West Church, Aberdeen, during the time of the funeral. The great bell Victoria in St. Nicholas Tower tolled from 11 till 11.30, at which hour the funeral was taking place at Newcastle, and representatives of the town council, the University, the school board, and the trades marched in procession to the church, in which also were assembled a large number of the general public.

Health of Aberdeen.

The zymotic diseases notified to the medical officer last week were: Measles, 5; scarlet fever, 12; typhoid fever, 1; whooping-cough, 41; erysipelas, 1; puerperal fever, 1; membranous croup, 1; total, 62, being 10 cases more than for the preceding week.

Aug. 28th.

IRELAND.

(FROM OUR OWN CORRESPONDENTS.)

Addresses from the Royal Colleges of Physicians and Surgeons, Ireland, to the new Lord Lieutenant.

ON Monday afternoon his Excellency the Lord Lieutenant received in the Throne-room, Dublin Castle, addresses from the Royal College of Surgeons and the Royal College of Physicians of Ireland. His Excellency was accompanied by the Countess Cadogan and the Hon. E. Cadogan, and attended by Sir William Kay, C.B., private secretary; Mr. Arthur Vicars, Ulster King at Arms; Mr. John Olphert, D.L., Gentleman Usher; Colonel Deane, Chamberlain; and Captain Fielding, A.D.C. in Waiting. The deputation from the Royal College of Surgeons of Ireland, which consisted of the President, Vice-President, and Council, was first introduced, and was most graciously received by his Excellency, who, in reply to an allusion by Sir William Thornley Stoker to the increasing importance of the educational work done by the College since it was incorporated under Royal Charter in 1784, made use of the following words: "I am aware that your schools of surgery have attained a high standard, of which you may be justly proud, and that they possess a reputation which extends to the most distant quarters of the civilised world." The address from the Royal College of Physicians of Ireland was presented by the President, Dr. Walter G. Smith. His Excellency the Lord Lieutenant, in his reply, seemed especially pleased by the reference which the address contained to the prominent position which some members of his ancient family had occupied some two centuries ago in Ireland.

St. Patrick's Home for Trained Nurses, Dublin.

A special service was held in St. Patrick's Cathedral on Sunday in aid of the St. Patrick Nurses' Home. Dublin is now crowded with visitors, both clerical, medical, and lay. His Grace, Lord Plunket, Archbishop of Dublin, addressed an unusually large audience on the occasion.

Royal Hospital Saturday, Belfast.

The street collection in aid of the Royal Hospital will take place on Sept. 14th. The Lord Mayor and the executive committee are putting forth every effort to make the movement this year a decided success.

Ulster Eye, Ear, and Throat Hospital.

At a meeting of the board of management of this institution on Aug. 20th the plans for the extension and improvement of the hospital as finally settled were approved of. The changes will cost £1300, the whole of which is in hand. On the advice of the surgeon, Dr. McKeown, it has been decided that one of the rooms in the extension should be made a special operating-room for delicate operations, such as cataract, and be fitted up in accordance with the requirements of aseptic surgery. It will cost about £65. The extension, amongst other things, will comprise four bath-rooms and closets, two day-rooms for male and female patients, improved accommodation for nurses and servants, additional ward accommodation, the special operating-room, and a laundry. It is hoped that the extension will be completed, or nearly so, in January, 1896, which will be twenty-five years after the foundation of the hospital.

Carnlough Water and Sewerage Scheme.

It is now hoped that this scheme will be pushed on to completion, as the Larne board of guardians have received from the engineer the plans, specifications, and estimate. These will be forwarded to the Local Government Board for their approval, and the water is to be analysed by Professor Hodges of Queen's College, Belfast. The cost will be met, it is proposed, by a loan to be repaid in instalments spread over fifty years.

Glenarm Water-supply.

Mr. L. O'Connor, medical sanitary officer of Glenarm, reported to the Larne board of guardians at their meeting on Aug. 21st that the water-supply is becoming quite inadequate owing to the quantity of water used in the hotel yards for cleaning and watering horses; and he recommends that the drivers of horses should be made to take the horses to the river and not to use the town supply. Glenarm is a centre towards which an immense deal of tourist traffic goes in the summer, and hence the waste of water at the hotels for the horses. The board decided to place one-inch meters on the supply of the two hotels.

Water-supply and Sanitation in Portrush.

A Belfast gentleman staying at Portrush wrote to the Local Government Board a strong complaint regarding the water-supply of Portrush, which he held responsible for an attack of gastric fever to which his son had been subjected. He also alleged that fever was rife in that town. This letter was transmitted to the local authorities, and a report on the matter was presented on Aug. 24th, at a meeting of the Coleraine guardians, from the Portrush Water and Sanitary Committee, in which they say that their medical officer, Dr. Martin, has carefully investigated the whole question and can find but three cases of illness reported, only one of which was under his care. This was a case of gastritis which did not originate in Portrush, as it was brought from a distance. The second case was one of water on the brain; and the third case, that of the son of the gentleman who wrote to the Local Government Board, was not brought under Dr. Martin's notice. The committee are satisfied from the statements of their medical officer that there has been no case of epidemic disease in Portrush this summer, and that the general health of the town has been exceptionally good. The Board of Works having now granted the loan requested for the extension and improvement of the water-supply, the works will be proceeded with without further delay, on the completion of which an ample and pure supply may be relied on.

Garvagh Dispensary.

I am very glad to be able to announce that the Coleraine board of guardians have decided unanimously to grant Dr. McNeary, the retired medical officer of Garvagh Dispensary, the full amount of superannuation which by law they are empowered to give. Dr. McNeary is now sixty-nine years of age. Since 1852 he has been in the service of the guardians, and only on one occasion has he, as a member of the board pointed out, put them to the expense of a locumtenent, when, through hard work and exposure, he contracted a cold which resulted in paralysis and subsequent incapacity for three months. Two-thirds of his salary will amount only to £88 12*s.* 11*d.*, not a large retiring income after such a lengthened service.

Crumlin Dispensary.

Mr. J. H. Carson of Portrush has been appointed dispensary medical officer of the Crumlin district. His golfing friends in Portrush, where he was a member of the council of the Royal Golf Club, have presented him with a valuable gold watch and chain.

Royal Hospital, Belfast.

At the quarterly meeting held on Aug. 26th, it was reported that during the past quarter 452 intern and 6038 extern patients were treated. Dr. Calwell has been appointed physician to the chest department in place of Dr. S. Smith (resigned). Financially there is an excess of expenditure over receipts for the past eleven months of £978 1*s*. The following members of the staff, who retire by rotation, were re-elected:—Dr. Ross (physician), Dr. J. Walton Browne (surgeon), Professor Byers (physician for diseases of women), Dr. Nelson (ophthalmic surgeon), and Dr. S. Smith (assistant physician). Dr. Lorrain Smith was appointed pathologist.

The Battle of the Clubs at Cork.

Last week I wired you the result of the conference which was held at the instance of the Mayor for the purpose of arranging, if possible, the dispute between the Cork profession and the clubs. I now propose to give you a few further particulars which may prove interesting to many of your readers. At the commencement of the proceedings one of the club delegates thought he would overawe the medical representatives by delivering a speech in which he declared that the rules formulated by the profession had been ignored by the clubs, and that prior to any exchange of opinions the rules should first be withdrawn. One of the medical delegates replied, firmly declining to withdraw the rules, and expressing regret that the previous speaker should think it necessary to assume the attitude he had. The medical delegates, he added, had come there on the invitation of the Mayor to discuss the matters in dispute calmly and even amicably. The Mayor agreed that it would be much better to interchange opinions without any undue heat. The rules were then taken up seriatim. There was considerable discussion on the one which provided that the charges for medical attendance on a member and his family, without medicines, should be 7*s*. 6*d*. when the income was under £100 a year, and 15*s*. when over that sum and under £200 a year. The club delegates stated that in some of the clubs it would be impossible to adopt a sliding scale of the kind for members, and said that in many instances even by having reference to the valuation of members' houses it would be difficult to ascertain their incomes. The medical men had all along been conscious of these difficulties and they were prepared to consider favourably the proposal that if the sliding scale were not insisted on the clubs would be willing to pay any reasonable remuneration. Again, the club delegates would agree to refuse admission to candidates in receipt of over £200 a year, but urged that existing members, no matter what their incomes, should be allowed to continue members of the clubs. As a great number of, I should say, opulent citizens joined the city clubs during the past ten years this proposition would require considerable discussion at the hands of the profession. The rule fixing the limit of distance at two miles the club representatives would modify by naming three miles, with the proviso that a member residing beyond two miles should pay car fare. They agreed to the rule that if a member of two clubs should require the services of the two club officers in consultation he should pay consultation fees to the second club officer. They also made no objection to the rule that a club officer should be at liberty to charge a fee if called to attend a member's wife within eight days after her confinement. It is evident that, as I have already mentioned, the crux of the whole situation was the question whether the medical men of Cork should meet in consultation the three imported officers, and last week I explained to you that loyalty to the Cork medical men who had previously been club officers would prevent the Cork profession from falling in with such an idea. An incident which has been freely commented on is worth referring to. One of the imported officers told the Mayor that he (the officer) should insist on a witness being present at the interview. The Mayor, equal to the occasion, retorted by asking him if he reposed so little confidence in the Mayor of Cork. This *contretemps* was all the more regrettable as both the medical and club delegates bear willing testimony to the impartiality, tact, and courtesy displayed by the Mayor throughout. As to the result of the three conferences I am distinctly of opinion that they were decidedly favourable to the profession. The medical delegates presented their case so incisively and at the same time with such calm dignity that a marked impression was evidently produced, not only on the Mayor, but also on the club delegates. One of the latter, who was most uncompromising at the beginning, was markedly conciliatory at the end of the proceedings, and expressed the hope and belief that the clubs would not introduce any other strangers into the city. In reviewing the present situation of affairs I would reiterate the grave warning given to the clubs by the Mayor. If an epidemic should break out in the city it may prove most serious to the clubs. The problem to be solved is, Can three medical men efficiently discharge duties heretofore performed by about a dozen? The universal opinion amongst the Cork practitioners is that victory is on their side, and that, to use a sporting phrase, they are winning "hands down." Time fights for the Cork men. Theirs is a waiting game, and I have no doubt success to a just cause is within very measurable distance.

Aug. 25th.

ROME.

(FROM OUR OWN CORRESPONDENT.)

Spermin and the Balneary Cure of Rheumatoid Arthritis.

YEAR by year the purely eliminative treatment of gouty and rheumatoid affections by thermo-mineral waters, whether in the form of bath or of beverage, has proved its insufficiency unless reinforced by concurrent measures preventing or antagonising the accumulation of uric acid in the circulation. Severely regulated diet is one, and not the least effective, among these supplementary modes of treatment; but even this—not always practicable, be it said, under the conditions of hotel life abroad—is not enough, and even by itself stands in need of supplement. The agent desiderated had been thought to reside in spermin ($C_5H_{14}N_2$), an organic base found in proportionally greater quantity in the testicles, in the prostate, the thyroid, thymus, and pancreatic glands, and in the spleen and ovaries, as well as in the blood. Investigation has subsequently elicited the fact that this body, so widely diffused in the organism, has a general physiological importance, enabling it to perform an essential part in what German biologists call "Gewebsathmung" (histological respiration). In solution it possesses the property of effecting and promoting physiological oxidation in and through the tissues—acting, in short, as a ferment in furtherance of the intra-organic oxidation referred to. Under normal as well as abnormal circumstances (it is known) the regressive metamorphosis of the albuminoid substances in the tissues yields a number of products, among which leucomaines, in the larger sense, play an essential *rôle*. These leucomaines represent all azotised products of the regressive metamorphosis whose oxidation stops short of urea, products classified as "intermediary," and their accumulation in the tissues (causing the "Autointoxicationen" of German pathologists) evolves, according to the place and character of each individual tissue, diseases of the most complex type, diseases constitutional and nervous, and of themselves predisposing to not a few infective maladies. Among these diseases arthritis urica has a place of its own, in which the imperfect oxidation that underlies it is susceptible of completion, till from the "intermediary" the product reaches the normal condition, and ceases to play the toxic part of its earlier stage. A stimulating, or rather tonic, agency effecting this metamorphosis has undoubtedly been found in spermin, only, however, in solution and as prepared on the principles laid down by its strenuous advocate, Professor Alexander Poehl of St. Petersburg. His paper in the *Zeitschrift für Klinische Medicin*[1] entitled "Einwirkung des Spermins auf den Stoffumsatz bei Autointoxicationen im Allgemeinen und bei harnsaurer Diathese im Speciellen" (Influence of Spermin on Metabolism in "Auto-intoxications" in general and on the Uric Acid Diathesis in particular) has made a profound impression on the balneological medicine of Italy, particularly as illustrated or confirmed by the series of cases (arthritis deformans, among others) in which its efficacy has been proved. With such an adjunct to his therapeutic armoury, aiding the action of the thermo-mineral waters, and reinforced, when indicated, by the "interrupted current," while favoured by a judiciously regulated dietary, the balneary physician approaches even

[1] Band xxvi., Hefte 1 und 2.

inveterate cases of rheumatoid arthritis with much less of the diffidence, not to say despair, of his predecessors. At the largely frequented waters of the Swiss Baden (Canton Aargau) spermin has been growing in favour with the profession, and its use in Italy has, I know, been sufficiently practised to vindicate for it the fair trial for which Professor Poehl so justifiably pleads.

Endemic Idiocy.

What pellagra is to the Lombardo-Venetian territory cretinism is to the southern slopes of the Alps, particularly in the province of Cuneo, the neighbourhood of Aosta, and all about Sondrio. France, too, has her not inconsiderable share of the scourge, which in her case, also, haunts the mountain regions—120,000, indeed, is the estimated cretin population of the Savoy, the Higher and Lower Alps, Arriège, the Jura, the Vosges, Aisner, the Maritime Alps, and even the Higher Pyrenees. Fully developed specimens of the cretin, moreover, are found in the Austrian Alps, the Carpathians, the Caucasus, and even in Thibet and the Andes. But the Alta Italia is the true traditional *nidus* of that form of "endemic idiocy" in its most marked and incorrigible type, dating from classic Roman times and evoking from Juvenal the exclamation: "Quis tumidum guttur miratur in Alpibus?" But if its presence has been so long familiar, its etiology remains obscure, still baffling the research of local and foreign investigators. Drinking-water deficient in iodine is assigned as one cause, while Mantegazza finds it in a combination of insanitary conditions—scanty ventilation, insufficient light, persistent humidity of the soil depending on special geological formation, and, above all, the unfavourable hygiene implied in the occupation of dwellings little better than caves embedded in mountain ravines and shut out from the genial sun. Of course, concurrent causes have their place in its development if not in its genesis, heredity and alcoholism among the number. A diet exclusively vegetable has also been suggested as one of these; but no explanation satisfactory to science has yet been found for a phenomenon of which we can only say with certainty that, as malaria is coincident with, if not consequent upon, deep-seated glandular disturbance manifested in hypertrophy of the spleen, so cretinism is associated with abnormal development of the thyroid; and that as malaria is favoured by marshy exhalation, so cretinism is at its worst when its victims respire the unrenewed air of confined mountain valleys and drink a water possibly deficient in alterative constituents, and assuredly deprived of the influence of the sun's rays. Such at least is the conclusion indicated by Dr. M. Gioberti in his researches through the Aosta ravines—a conclusion, I may add, not yet checked, as in the case of malaria, by investigations resulting in the detection of a pathogenic micro-organism. Klebs, it is true, some twenty years ago, announced his discovery of *naviculæ*, or special bacilli nestling in the alveoli of the thyroid; bacilli also were found quite recently by Maggi in the water conveyed by the town council of Milan from the Brembo—an Alpine source. But these results have not obtained even the provisional plausibility of those claimed by the discoverers of the malaria microbe; and pathology, for the present, declines to commit itself further than this: that (in the language of Dr. Stura, whose interesting paper is the most recent on the subject) "the goitrous agent affects the cortical substance of the brain, and that the thyroid gland, by hypertrophy, compensates in some measure the pernicious action of the cretinogenous germs up to a given point, beyond which cretinism supervenes by cerebral poisoning. Something similar happens in and through the spleen and liver in the majority of infective maladies, miasmatic as well as contagious." Removed from his native surroundings, the cretin, when not too late, does lose some of his degenerative characteristics; but as a rule these are far too inveterate even for mitigation. The dwarfish stature; the wrinkled, semi-bestial countenance, partaking of that of childhood and old age; the flat nose, *retroussé* and compressed inwards at the root; the blubber lips, and tongue generally protruded and viscous with tenacious saliva; the small eyes, now protuberant, now sunken; the swollen eyebrows; the motionless, stolid look; the soft, pasty, livid integument, with the nails enormously hypertrophied; the thyroid many times its normal size; the head squat and depressed at the vertex and temples, while gibbous at the occiput, and always out of proportion to the body; the hair luxuriant, but shaggy, and falling naturally into wisps; the breast caving in; the fingers thin and elongated, with articulations scarcely perceptible; the soles of the feet large, sometimes curved in pithecoid fashion—such are the physical marks, having their physiological analogue in a languor of all the functions except that of the stomach, though even this has little discrimination as to food, and will on occasion satisfy itself with earth or chalk, or the "pica-*menu*." The cretin lives like an animal, lolling on the highway, generally in the sun when he can get it, or when he attempts to walk, yawing, with pendulous arms, like a drunken man, irrespectively of obstacles or dangers. His life is mercifully a short one, like that of most idiots—the brain being seldom equal to more than instinctive acts, often predatory or inclining to habits mostly evil. Of course, from this type of the absolutely brutish creation there are deviations for the better, in which improvement is possible even to the extent of agricultural labour, sometimes of reading and writing. But ameliorative effort is all too ineffective, and the rehabilitation of the cretin remains among the opprobria of medicine. "It will yield only," says Dr. Stura, whose admirable paper has suggested not a few of the above details, "to the great prophylactic means indicated by hygiene ..... removal of individual cretins from affected localities. This method, the most rational, is unfortunately the most difficult to put in practice. ..... Emigration, facilitated by railway communication with the valleys afflicted with the endemic, would be most advantageous. Very useful would also be improvement of dwellings, pure water-supply, and regeneration of the soil." All these, however, are but general rules for dealing with a phenomenon which, as the product of a violated hygiene, must be counteracted by a reassertion of hygienic law till, as savage beasts inimical to man and civilisation are disappearing from the world's fauna, so cretinism, like other monstrosities, will shrink in prevalence and character and become a memory, preserved in museums, of an ill-regulated and unregretted past.

Aug. 26th.

VIENNA.

(FROM OUR OWN CORRESPONDENT.)

Death from the Electric Current.

AT a recent meeting of the Styrian Medical Society Professor Kratter read a paper on the case of a workman who was killed by a shock received whilst he was occupied in straining telegraph wires. Post-mortem examination, performed twenty-one hours after death, showed a ruptured blister on the left forefinger, marked rigidity, and intense ecchymosis on the dependent parts of the body. There were also hypervenosity of the blood, venous engorgement of the lungs, extravasation of blood into the common sheath of both the carotid arteries and the vagus nerve, and symmetrical hæmorrhages along the spinal cord. If an electric current of 1500 volts acts upon rabbits some of the animals live, and others show typical symptoms such as tetanic contraction of all muscles and instantaneous stoppage of the respiration, the heart nevertheless continuing to act. There may also sometimes be found disorganisation of the brain, with destruction of the peripheral parts of the cortex and intra-cranial effusion of blood. The stoppage of the respiration lasts half a minute. From these experiments it results that the first effect consists in permanent or temporary arrest of the respiration. Death from electric shock is, therefore, a form of suffocation, and persons who meet with such an accident are to be treated by artificial respiration, as in ordinary cases of suffocation.

A Follower of Tolstoi.

Dr. Skarvan, who has until now been on six months' service with the Austrian Medical Staff, has been tried by court-martial on charges of insubordination and expressing opinions subversive of discipline. Being a true follower of Tolstoi, he was fascinated with the utopian schemes of the Russian reformer, and supported his theories in a letter addressed to the commander of the garrison hospital, wherein he pointed out that military service is incompatible with humanity and announced his intention of disregarding authority. The court unanimously found the charges against the prisoner proved, condemned him to three months' imprisonment and to the loss of his diploma, and forbade him to practise his profession in Austria-Hungary or in the States connected therewith by treaty. The matter cannot, however be allowed to end here, for although the court-martial

may be empowered to punish Dr. Skarvan, it is in nowise authorised to cancel his diploma, which he while a civilian obtained in Innsbrück. This case has not failed to cause a great sensation throughout the medical profession.

Equinia in Man.

Dr. Honl has recorded a case of equinia in the *Klinische Rundschau*. The patient is thought to have contracted the disease while treating a horse affected with nasal catarrh of a suspicious type. He had numerous abscesses, and under his left knee-joint there was a diffuse, fluctuating, painful swelling; there was no discharge from the nasal passages, but there was a slight swelling of the nose and some erosion of the right tonsil and the soft palate. At the post-mortem examination hæmorrhages on the pleura, deficient expansion of the lungs, and brittleness of the cardiac muscle were found. Microscopical investigation showed leucocytes and bacilli. The discharge possesses a characteristic reaction, for when it is injected into the abdomen of a male guinea-pig swelling of the testicle occurs within twenty-four hours, and a culture of the bacilli may be found between the tunica albuginea and the other tunics of the testicle. The disease is communicated to man by the discharge coming into contact with a recent wound or with the mucous membrane of the nose, mouth, or conjunctiva. Sero-therapy will doubtless be the future treatment of equinia, for by injection with serum Chenean and Pick have succeeded in preserving guinea-pigs from infection.

Serious Effects of Serpent Venom Absorbed through a Wound of the Mouth.

Dr. Hirschhorn has published the case of a man who suffered from the effects of serpent venom after sucking the wound of a girl who had been bitten by a viper. The girl recovered within a week, but the man had a painful swelling of the left submaxillary region extending to the neck, the chest, and the upper extremity, and he suffered also from vertigo, inability to stand, and clonic and tonic spasms of the left side of the body. The seizures lasted from half an hour to three hours, and after they ceased the skin assumed a reddish colour with blotches elevated above the general level. This exanthem resembled urticaria and caused a sensation of itching, disappearing after two hours. The spasms and the aura ushering in the paroxysms suggested epilepsy, but there was no unconsciousness. Examination showed that the inoculation had taken place through the gum, which was lacerated in consequence of the extraction of a tooth. Dr. Hirschhorn supposed these paroxysms to be toxæmic; bromide of potassium was administered, and the patient is at present free from them.

Aug. 24th.

EGYPT.

(FROM OUR OWN CORRESPONDENT.)

Statistics of Kasr-el-Aini Hospital.

THE total admissions for 1894 were 4090, and an analysis of 690 cases admitted into one of the two medical sections of the hospital is interesting as throwing some light upon the relative frequency or rarity of well-known diseases. 19 men were admitted with typhus fever and 1 with relapsing fever; but, on the other hand, as in former years, there were no admissions from enteric fever. This racial difference, seen also in India, has yet to be satisfactorily explained, for unfortunately typhoid fever is common among Europeans. Intermittent fever accounted for 32 cases, and 6 others had enormous malarial spleens and ascites. Ankylostomiasis was diagnosed in 119 men and 6 women, and pellagra was present in 27 men and 1 woman, while bilharziosis was recognised in 20 men and 1 woman. Abscess of the liver was diagnosed in 9 men and also in a tenth which proved to be a suppurating hydatid; but cirrhosis of the liver, generally dependent on some cause other than alcohol, was found only in 4 cases. Aneurysm of the aorta occurred in 1 man; this, like other aneurysms, is rare in Egypt. Parenchymatous nephritis was present in 19 men and 10 women, but the granular form is rare, as might be expected in a country where alcohol and gout are little known. Cerebral hæmorrhage occurred in 5 men and 4 women, but it must be remembered that syphilis is not treated among the lower orders who fill the hospital wards. 2 men had locomotor ataxy, 7 had disseminated sclerosis, and, curiously enough, 3 had general paralysis. This last is a disease which is rare in this country as in most others where civilisation is not far advanced and where the population lives chiefly on cereals. It is regrettable to notice that 11 men and 2 women were admitted drunk, and there were also 4 cases of datura poisoning, besides 1 of hasheesh poisoning and 1 of mercury poisoning (an attempted suicide). The datura poisoning again reminds one of India. The story is always the same. A country man meets a town dweller who is travelling in his direction and who after some conversation proposes that they shall rest in the shade and eat their meal together. Sooner or later the townsman produces a cake or sweetmeat, and the bumpkin remembers no more until he finds himself in a hospital robbed of his money and goods.

The Government Hospital at Alexandria.

This hospital, with 180 patients, has changed so much for the better since 1884 that it can hardly be recognised. Roads have been made, the surrounding ground levelled, gardens laid out, and various pavilions erected. One is for infectious patients and another for sterilising the goods of the whole town, which are sent there in three special carts; while a flying ambulance does the necessary work at the patients' homes. During the month of May, for instance, 902 articles were disinfected, coming from 32 cases of infectious disease, and 49 private rooms were disinfected. A welcome legacy has been expended in building a kiosque where all water for hospital use is filtered by means of the block system. The consequence is that the patients of this hospital have at present a purer water-supply than any provided by the municipality.

Alexandria Water Company.

During the last eighteen months the attention of the municipality has been directed to the improvement of the water-supply of the town, and their efforts have been considerably aided by the able reports of Dr. Bitter, their sanitary inspector, who has had the advantage of being trained under Professor Koch. Assuming that the population of Alexandria is now 250,000, he has shown that the rich get an average of 500 litres of water daily, while about three-quarters of the people have to be content with only two or two and a half litres a day. Moreover, the poor have the privilege of paying for their water at a rate which is forty-six times dearer than the subscription levied on the rich. Until a year ago the intake was direct from a branch of the Mahmoudieh Canal, the banks of which were exposed to every sort of pollution in which the Oriental delights. This stream is now walled or pallisaded in on both sides, an improvement suggested by all sanitarians since the early days of the English occupation; but the quality of the water is, of course, of principal interest. In 1883 Professor Koch found that the so-called filtered water as supplied by the Alexandria Company contained several thousands of germs in a cubic centimetre. In 1894 Dr. Bitter's report was equally unfavourable. To-day the analyses show that both the canal water at the intake and the company's water as supplied to the consumer contain on an average 1500 germs per cubic centimetre. It may be said that in the spring of this year the water company supplied as many as 10,000 micro-organisms in the cubic centimetre; and yet the mortality for the first four months of 1895 showed a diminution of 1500 in comparison with the same period in 1894. It having thus been shown that the company's filter beds were practically of no value and could never supply the ideal water containing always less than 100 germs in the cubic centimetre, Alexandria naturally became desirous of having water at least as good as that supplied to Cairo, where the filter beds are greater in area and better constructed, and where the filtering process is carried on much more slowly. Dr. Bitter's proposal to erect sample filters as an experiment was accepted, and £1200 very generously voted to pay expenses. Since last September three systems have been on trial, and every day a bacteriological analysis has been made of the water of each filter. The block system, and another by which the water is first purified by Anderson's process and then by ordinary sand, yield the best results as to quality, showing only some thirty to fifty germs per cubic centimetre, but it is doubtful whether the necessary quantity could be supplied in the given time. It is possible, therefore, that the company may have to fall back upon sand and gravel as forming the best bed under the circumstances. The company, which is an English one and has a far-reaching monopoly, is fortunately willing to accept the advice, but no always the proposed reforms, of the sanitary inspector.

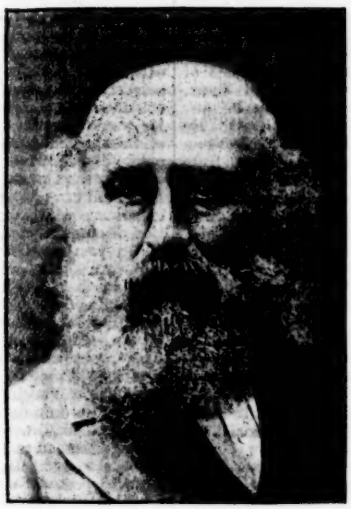
Cairo, Aug. 19th.

Obituary.

JOHN SYER BRISTOWE, M.D., F.R.C.P. LOND., M.R.C.S. ENG., LL.D. EDIN., F.R.S.

BY the untimely death of Dr. Bristowe the medical profession has suffered a loss which is likely to be long felt. He was sprung from a medical family, his grandfather having been a medical practitioner in Ilkley in Yorkshire, while his father, the late Mr. John Syer Bristowe, M.R.C.S., L.S.A., practised for many years in Camberwell. His mother was one of the Chesshyres of Cheshire, a very ancient family, as indeed was also that of Bristowe. Dr. Bristowe was born at Camberwell in 1827, and after spending a few years at preparatory schools was educated at King's College. After leaving school he remained a year assisting his father at home. In the year 1846 he entered at St. Thomas's Hospital. At that date he had no greater ambition than to succeed to his father's practice, but in a fortunate moment he entered the London University, and his success at the matriculation examination, where, though he just missed the first place, he was specially sent for and complimented by the examiners, was his first encouragement to aim at a higher career. Once inspired with the desire to excel, the energy of his character and the power of his intellect finally asserted themselves. He took most of the prizes that were to be obtained at St. Thomas's Hospital, and in the year 1848 he was awarded the Treasurer's gold medal. He also obtained the Apothecaries' Society's gold medal in botany. At the intermediate examination in medicine at the London University in 1848 he took the exhibition and medal in materia medica. In 1849 he qualified as M.R.C.S. and L.S.A., and in the same year was appointed house surgeon to St. Thomas's Hospital. In 1850 he took his M.B. and obtained the medal and scholarship in surgery and the medal in physiology, and in the same year was appointed curator of the Museum of St. Thomas's Hospital. About the same time he became pathologist to the hospital and performed the duties of that office for ten years. In the same year he was appointed to assist the late Mr. Grainger in the lecture theatre. At this time his sympathies lay rather with surgery than with medicine; however, in the year 1852 he took his M.D. degree, and in 1854 was elected assistant physician to his hospital. In 1859 he became lecturer on botany, and in 1860 was appointed full physician and lecturer on materia medica. In 1865 he was appointed joint lecturer on general anatomy and physiology, and in 1870, on the retirement and at the request of Sir J. Simon, he was appointed lecturer on pathology. In 1876 he became lecturer on medicine, a post which he held until his retirement in 1892. On the death of Dr. Peacock he became senior physician. In 1856 he was appointed medical officer of health to Camberwell, and he held that office till his death. At the end of 1856 he married Miriam Isabelle, eldest surviving daughter of Mr. Joseph P. Stearns, of Dulwich, and afterwards of Cranbrook Park, Essex.

When the Commercial Union Assurance Company commenced a life department in 1862 he was appointed medical officer. This post he also retained until his death. He was also physician to Westminster School for over thirty years, and when the question of the removal of that school into the country was raised he used his influence strongly to prevent it. At the Royal College of Physicians of London he had a distinguished career. He was elected a Fellow in 1858. He was examiner in medicine in 1869 and 1870. In 1872 he was appointed Croonian lecturer, and chose for his subject "Disease and its Medical Treatment." In 1879 he was appointed Lumleian lecturer, the subject then being "The Pathological Relations of Voice and Speech." He was Censor in 1876, 1886, 1887, and 1888, and Senior Censor in 1889. As an examiner he held appointments at the Royal College of Surgeons of England, London University, Oxford University, and the War Office, which last he held at the time of his death. In 1881 he was elected a Fellow of the Royal Society, and was given the honorary LL.D. at the Tercentenary Festival of Edinburgh University, at which he was appointed to represent St. Thomas's Hospital. He was one of the early members of the Pathological Society, and he never ceased to be grateful to the late Dr. Peacock for having induced him to join. He was President in 1885, and his earliest writings are in the third volume of its Transactions. He was President of the Medical Society and Lettsomian lecturer in 1893; President of the Metropolitan Counties Branch of the British Medical Association in 1887; and President of the Neurological Society in 1891. He was also President of the Society of Medical Officers of Health. He was Vice-President of the Sanitary Protection Association; Corresponding Member of the Edinburgh Medico-Chirurgical Society; and Honorary Member of the Ophthalmological Society, of the West Kent Medico-Chirurgical and the Sydenham District Societies. When the West-end Hospital for Diseases of the Nervous System was reorganised he was appointed consulting physician, and he was recently appointed consulting physician to the Victoria Hospital for Children. On the resignation of the late Sir Andrew Clark he accepted the presidency of the Hospitals Association in spite of strong opposition against that body displayed by many of his medical friends. He also interested himself greatly in and was on the council of the Royal National Pension Fund for Nurses. In his earlier days he did a considerable amount of sanitary work for the Public Health Department of the Privy Council. He reported on phosphorus poisoning in the manufacture of matches in 1862, on infection by rags and paper works in 1865, and, in conjunction with Professor Burdon Sanderson, on the cattle plague. In 1863 he reported with Mr. Holmes on the sanitary condition of English hospitals. All of these reports are buried in Bluebooks.



JOHN SYER BRISTOWE, M.D., F.R.C.P LOND., &C.

As a physician probably his reputation stood highest in the department of diseases of the nervous system, and by many of the public as well as of the profession he was regarded as a specialist. His wards always contained a large number of most interesting cerebral and spinal cases. Many of these were specially sent to him, some from long distances. The classes of cases which specially interested him were perhaps cerebral tumours, cerebral syphilis, thrombosis of the sinuses, hysteria, general paralysis, locomotor ataxy, disseminated sclerosis, and paralysis agitans. He threw much light on the diagnosis of tumours of the corpus callosum, and gave

a very valuable description of the symptoms of that affection. He successfully diagnosed many very obscure cases of cerebral tumour, often localising them very exactly. The cases of "Marion" and "Jimmy," well known to his old pupils, were the exceptions which proved the rule. In the case of "Jimmy," who, after being long an inmate of St. Thomas's Hospital, was taken in at Guy's Hospital and eventually died there, the diagnosis of cerebral tumour made at both hospitals was found to be erroneous, the disease proving to be chronic hydrocephalus. In the case of "Marion," who was an inmate of St. Thomas's Hospital for nearly three years, the original diagnosis of cerebral tumour was given up some time before she died and that of structural disease substituted. No lesion, however, was discovered at the necropsy. To his early recognition of the syphilitic nature of a cerebral affection many a patient owed his life or escape from incurable paralysis. The subject of cerebral syphilis he ably discussed in his Lettsomian Lectures before the Medical Society of London. His work in connexion with the symptoms and diagnosis of thrombosis of the cerebral veins and sinuses also deserves special mention. Of immense value to his pupils was his teaching on the subject of hysteria. From time to time he had most extraordinary examples of this disease under his care. He sometimes, although rarely, took a case of functional disease to be organic, but it was very exceptional, if it ever occurred, for him to diagnose a case as functional which proved to be otherwise. He would tell with much delight of cases where his diagnosis of organic disease had been falsified. He was constantly illustrating and impressing on his pupils the difficulties of diagnosing general paralysis of the insane in its early stages, and often demonstrated the symptoms of the disease both in early and in well-marked cases. Although neurology had a great fascination for him he took an equal interest in diseases of the abdomen and chest. He always examined his cases with very great care. He was an excellent auscultator, and the conclusions he arrived at from physical examination were always very accurate. He had a very large experience of abdominal cases, and his opinion in such was highly prized. He was always ready to go down to the hospital at any hour of the night to see a case of urgency. The cases he was most frequently called to in this way were those of acute intestinal obstruction. In these, wherever the conditions were favourable, he called into requisition the services of the surgeon at the earliest opportunity.

It has sometimes been said of Dr. Bristowe that he belittled treatment and that he did not believe in drugs. Such was really far from being the case. He was ever ready to give such drugs as had a proved value. He would quickly give iodide of potassium in syphilis, salicylate of soda in rheumatism, arsenic in pernicious anæmia, iron in chlorosis, and opium, digitalis, bromide of potassium, &c., where he thought they would be beneficial. He was, on the other hand, strongly opposed to irrational therapeutics and always expected to be given a sufficient reason as to why a certain drug had been prescribed by his house physician. Where there was no special indication for any particular drug his favourite prescription was compound infusion of gentian.

In 1887 his time as physician to St. Thomas's Hospital came to an end; but by the unanimous wish of his colleagues he was requested by the governors to retain his position for another five years. In 1892 he retired and was elected consulting physician and governor. On the occasion of his retirement his old pupils and colleagues subscribed to a testimonial for him, a portion of which was expended on a portrait of himself which was painted by one of his daughters and presented to St. Thomas's Hospital. The greater part of the money collected was, however, at his own request devoted to founding an annual medal as a prize for pathology.

Dr. Bristowe's contributions to medical literature were numerous and valuable. His style of writing was lucid and simple, and he was one of the greatest masters of the English language which the medical profession has possessed. His best-known work was "The Theory and Practice of Medicine," which was first published in the year 1876 and has passed through seven editions. This book has always been one of the leading text-books on medicine and has made his name familiar to the medical profession both in England and abroad. One of the most valuable portions of this work is the chapter on insanity, which was the result of original investigations carried out with the utmost care and patience. In 1888 he published a volume on "Diseases of the Nervous System," which was a compilation of cases. At that time it was his intention to publish similar volumes on diseases of the rest of the body, a work which failing health unfortunately prevented him from accomplishing. To show how varied was the bent of his mind we may refer especially to his presidential address at the Neurological Society, when the subject he chose was "The Relation of Mind to Brain," and his pamphlet on the nature of the Welsh "Ll," in which he showed that it was really an aspirated "l." He also gave much time and attention to the teaching of the dumb to speak and to the question of the formation of the various letters. On this matter he was held as an authority. His varied contributions to the medical journals and societies are too numerous to mention here.

As a teacher Dr. Bristowe was unsurpassed, and so much was his clinical work appreciated that many distinguished physicians of the day were wont to accompany him round his wards; indeed, it may almost be said that as a teacher he displayed his greatest powers, and only those who were privileged to learn from him can properly appreciate the great loss that medicine has sustained. He did not attempt to teach in the wards what might equally well be learnt in the school. He never adopted the plan of sitting down to one particular case and making it a text on which to discourse about the etiology, symptoms, physical signs, diagnosis, &c. of the disease concerned and of perhaps half a dozen other diseases with which it might be confounded. His method was a very different one. He seldom dwelt very long on one individual case, for in the course of his round of two or three hours he made a point of seeing every patient and saying something about each. He would ask for the report of the clinical clerk and house physician, or he would perhaps himself give a short *résumé* of the case. He would then carefully examine the patient and ask some of the students to do so also, attracting their attention to points of difficulty or of special interest. He would ask for opinions and then give his own with his reasons for it. He would often relate *à propos* of a case others from his rich experience which would help to throw light on it. This relation of cases formed a most valuable part of his teaching. He had a wonderful memory, and could recall small details about a case which he had seen perhaps years previously.

It was largely owing to a letter addressed by him to Lord Granville, then Chancellor of the London University, that the question of increasing the facilities for the obtaining of degrees by London medical students is in its present position. During the Marquis of Salisbury's Administration in 1886–92 he was placed on the Royal Commission to inquire into Vaccination, and as long as health permitted he worked hard on its behalf. He devoted most of his time to his professional work, but was no mean artist. In his earlier days he studied painting, and had some thought of devoting his life to art. In his student days he was in the habit of drawing portraits of his teachers, fellow students, and others, a practice he continued through life, and he has been said to have frightened candidates at examinations by this habit. At the age of seventeen he published a volume of poems; since then he has written many others, and during the last few years has published a further volume.

Of Dr. Bristowe's mental and moral qualities little remains to be said. To the outside world he was a quiet and courteous gentleman. To those who had the privilege of his intimate acquaintance he was an attached and faithful friend; and no man was more capable than Dr. Bristowe of inspiring love and admiration. It may be added that he had a considerable fund of humour and was an excellent host. His mind was essentially great. He was absolutely without crotchets and was incapable of petty jealousy or of any mean or paltry act. In his aims he was guided solely by considerations of duty, without regard to personal or selfish motives. His opinions were only formed after mature thought; but when once he had formed them nothing could induce him to depart from the course which he considered to be the right one, even though that course might be detrimental to his own interests. On several occasions during his career this characteristic manifested itself. One of these, which will probably recur to many of our readers, was in 1881, when he ventured in the face of general professional opposition to assert the propriety of not refusing to meet homœopaths in consultation.

His illness dated from the death in 1892 of his brother, Thomas Lynn Bristowe, late M.P. for Norwood, which

powerfully affected him. This was followed by an attack of influenza, which left trouble behind it, of which his premature death was the final result. Within a week of his end he went with his family to Monmouth in the hope of recruiting his strength. Though he appeared to arrive there in his usual health and in good spirits symptoms of cardiac failure manifested themselves after a few days. He passed away quietly in the presence of his wife and family.

For the following appreciative estimate of the life and work of Dr. Bristowe we are indebted to Dr. W. M. Ord, who was his life-long friend:—

"It is now forty-two years since, as a first year's student at St. Thomas's Hospital, I made the acquaintance of Dr. Bristowe. He was then Lecturer on Botany, and although only some twenty-seven years of age was clearly marked out for distinction. He had been first in his year during his student career, and had attained a very high position in the examinations for the degree of Doctor of Medicine in the University of London, taking more than one scholarship and several medals. His lectures on botany had a distinct attraction for an earnest student. They were delivered with ease and with a singular freedom from affectation, particularly the affectation of superior knowledge or authority. With a frankness characteristic of him through life he was wont to say that he really knew nothing about botany. This was far from true; for, as a result of hard reading and practical study with the microscope, he was much more than sufficiently versed in structural botany, to which he devoted the larger part of his course. It was natural to him to like this kind of investigation, and his logical mind enabled him to put before his class such things as the minute anatomy, the reproduction, and the morphology of the chief divisions of the vegetable kingdom in a terse, coherent, and suggestive form admirably calculated to stimulate the exploring faculty in his hearers. To classification he paid little more than formal attention. Out of class he was genial and affable, setting us, his pupils, perfectly at ease in his presence. Hence a botanical excursion with him as leader was a truly pleasant function, for we felt as we traversed lane, wood, and down with him that our teacher was, notwithstanding his high attainments, of our own flesh and blood. His studies in botany had not included much more than medicinal plants and the ordinary types of orders. When a plant was brought to him which he could not identify he said quite plainly that he did not know it. The avowal and the comic smile with which it came increased our respect for the true man that he was. We were, of course, conscious that he was not specially a botanist, but that he was filling the chair, according to the practice of the time, as a step in medical promotion. None the less, however, did we feel the value of what he taught us. Such early experience was soon after followed by his introduction to us in the wards, in the out-patient department, and in the post-mortem room. In common with the rest of the assistant physicians, he was allotted a few beds in the medical wards. In all these scenes of practical work we found him again the helpful teacher, full of *camaraderie* on the one hand, and, on the other, in knowledge and method a master, himself striving every day to advance medical knowledge. Those who followed him then and after will never forget his painstaking examination of patients, his minute and extensive record, and his pictorial description of symptoms. As he took the cases they came out clear for diagnosis or discussion of diagnosis, with acute note of everything that was irregular or novel. Further, a remarkable facility in drawing enabled him to illustrate on paper or the blackboard the probable conditions of viscera &c., just as the same facility, freely used, had helped to give life to his lectures. He certainly showed an abiding temptation to the artistic use of pen or pencil, mostly of the pen. When a clinical student he might frequently be seen sketching endless varieties of heads, of animals, and *grotesqueries*, generally in excellent style, on the well-suited calf in which the old ward-books were bound. When one of these covers was completely filled, the sketches were touched up and linked by lines and shading, the fantasies of his pen becoming objects of admiration and cupidity. Mr. Whitfield, then medical secretary, became possessed of several of them, his well-known collecting genius appreciating their value and treasuring them accordingly. I think that Bristowe kept one or two; the rest are probably scattered amongst the mementoes of his old fellow students—mementoes of the time and the man. This habit never left him. So long as he continued to attend meetings and committees at the hospital he continued to leave on the foolscap placed on the table drawings and caricatures to be garnered afterwards by appreciative hands. It is, of course, well known that he had early in life and at a later period published many poems of considerable merit, displaying the same imaginative faculty which, in addition to skill of hand, made the value of his sketches. It came to pass, as I knew him more, that two things greatly perplexed me. First, the accomplished artist wrote a hand which, though not ugly, was difficult to read on account chiefly of the blurring of the ends of words and the imperfect formation of many of the letters. He could write plainly enough when he gave his mind to it, but as his thoughts were placed upon paper they seemed to outstrip his pen, leaving a dash here and a wavy line there, only to be interpreted, if interpreted at all, by a reader who had carefully followed the train of argument or the course of statement in which they were intended to play their part. On this point he used to tell with great enjoyment a story against himself. In an examination at the University of London, when he came up for the vivâ-voce his examiner placed before him several words cut out of his papers and asked him to read them to him. In the absence of the context he was unable to supply the information. It was creditable to the patience of the examiner (the late Dr. Carpenter) that he did read the papers, and in the end awarded the scholarship in competition for which they were written to Bristowe. The second puzzle was that the man of imagination should be so strongly filled with a spirit of scepticism as to be a worthy follower of the Apostle after whom our hospital is named. In Bristowe's case imagination was tempered and more than controlled by an innate tendency to questioning, both in regard of facts and inferences. The question did not go so far even as 'Why?' but stopped first at 'Is it so?' leaving the 'Why' to be considered if the answer to the first question was satisfactory enough to allow him to proceed to the second. He could, fairly enough, take nothing for granted; he seemed, however, to go further and to take up a position almost hostile to any new thing, great or small. He would be as slow to accept the existence of a valvular murmur or a friction sound which had been noted by his assistants as to adopt a new theory of the meanings of the heart-sounds in health or disease. This slowness of conviction led him on to most valuable investigations. He would often, in spite of the already accepted opinions regarding them, follow out for himself the intricacies of many obscure symptoms and diseases, sometimes confirming, sometimes dissenting from, the earlier decisions, rarely without adding materially to our knowledge. He was thus always determined to make sure of his evidence, always determined to see, if possible, the truth, independently of all the weight of existing authority. None but those who have carefully followed his work know the great value which this stern spirit of true investigation has attached to it. It appears to me that the whole school of St. Thomas's has been deeply impressed and most wholesomely disciplined by the word and example of Bristowe, himself doubtless influenced, as no doubt others have been, by the severe rules of conscience inculcated by George Rainey. Onward, as time allowed him to verify things that had been often more than doubtful to him, he was able to form conclusions. The scepticism, which had almost amounted to prejudice, tended then to be in many instances replaced by a conviction. Once satisfied, he would support the new or received idea and would do battle for it as strongly as he had before doubted it.

"'There lives more faith in honest doubt,
Believe me, than in half the creeds.'

This is assuredly true of the man whose loss we have at heart. His mental attitude in controversial matters was well seen in respect of his political opinions. For a great part of his life he was a Liberal in politics; but when the Home Rule question filled the field he felt impelled to his wonted process of examination, with the result that he became first a Liberal Unionist, and afterwards something very like a Tory. In one point his scepticism has produced an impression which is far from just or true; I mean in regard of his way of dealing with therapeutics. He is generally said to have given too little attention to the subject of therapeutics, alike in his great work on Medicine and in his hospital teaching. In my belief he could not preach

many uses of drugs and many accessory treatments because he had not sufficiently proved them. He seems to have felt like David in face of the armour provided for his use. Yet he could use the sling and the stone effectively, and many a time have I seen him trying the armour in hope of availing himself of it when he understood its application. I remember very well witnessing his careful trials of injections of salt water and dealbuminised serum into the veins of cholera patients in 1854. And I know that he urged strongly the establishment of a complete installation of baths of all kinds in the new hospital on the Embankment, in view of a thorough estimation of their remedial applications. Those who knew him know well that it was only the same caution which forbade him to give an absolute diagnosis in a case of doubtful diagnosis which forbade him also to teach decisively any method of treatment about which he was not absolutely certain. For all of us diagnosis must precede treatment. I say without hesitation that diagnosis was so regarded by him, and that he neither despised nor failed to make active use of therapeutics wherever his reasoning allowed. The world may be sure that whatever he said or left unsaid was determined by the use of a strict judicial estimation of the value of the information supplied to him by his extraordinary industry in reading and in research. Those only who have toiled as he toiled can fairly judge him in respect of the matters which have been noted. They are indeed few. In what I have so far written I have put down my recollections of Bristowe as I first saw him, and I have tried to trace the development of the qualities which were then apparent in him.

"As time passed we became colleagues, and I was then admitted to his more intimate friendship and to his home. While I learned more, now, of his vast professional knowledge, I came to learn more of his true, generous quality of heart in dealing with his fellow men, even where he was determinedly opposed to their opinions. I saw the kindly fairness underlying that appearance of rigidity, scarce short of obstinacy, which seemed to make him a hard judge of both theories and actions, and many a time have I felt the kindness and the thrust, only with increase of the trust and the affection which he inspired. His innate fairness, indeed, with his kindliness, led him some years ago to give an address at Ryde of so lofty a character as to expose him to much harsh comment on the part of the people who could not reach to his standpoint. His inner life was essentially domestic. The hours devoted to work were succeeded by a happy life in the family, full of all kinds of wholesome activity. In his recreations he was alike simple. It was his delight to go with his wife and children to places where nature provided the best of society. In such places he would revel, taking long walks with his family and friends, letting the imaginative part of his being find food and response in the hills, by the sea, and on many a country side. Then, the cares of life, the trammels of the daily duty, and the requirements of the publisher forgotten, he would read aloud the glorious page before him, always with some fresh intonation. If I may dare to add a word I should like to say with deep respect how much he was helped by the companionship of his bright, clever, and affectionate wife who is now left to bear the great sorrow of her life. Others, doubtless, will state in detail the achievements of Bristowe's career. They are, indeed, well-known. Whatever they may cover in recital, they cannot cover all that he has done for medicine and for medical men. They can never reveal the influence which he has exerted on fair investigation or the widespread influence of his teaching of the higher class of students during the last four decades. He lived, so to speak, in teaching, in imparting to chosen young men of the higher aptitude the results of his long years of observation and experience. His words have truly, in one way and another, gone out to the ends of the earth. A true, generous, and affectionate friend, he has left a void which can never be filled for those who knew him closely. He was *justus et tenax propositi*, and was ever above the *cirium ardor prava jubentium*."

The following is from the pen of a Fellow of the Royal College of Physicians of London who was much associated with Dr. Bristowe and enjoyed the benefit of his friendship:—

"The loss of Dr. Bristowe is a matter for more than ordinary regret, for he was an exceptional man whose character and whose turn of mind tended to exalt the profession to which he belonged. There probably never was a man who practised medicine with less of the commercial bias. He had in him much of the philosopher, nothing of the advertiser; he combined a keen logical faculty with absolute truthfulness, which he brought to bear not only upon his relations to others, but in regard to his own convictions. He was by nature and habit a sceptic, and carried his scepticism into therapeutics, not, perhaps, beyond the wisdom of a philosopher who would not venture further than he was sure of, but too far for the worldly-wise who may often prescribe with more assurance of satisfying the minds of their patients than of benefiting their bodies. He was great as a pathologist, great as an observer of disease in its natural course, and great as a clinical teacher. Critical and uncompromising, he was rather a great professor than a popular practitioner. He followed his line of thought whithersoever it led and never shrank from conclusions which his premisses indicated. Conscientious to the total disregard of his interests, he was 'too fond of the right to pursue the expedient.' It is possible that his consciousness of rectitude of purpose and of logical consistency may have sometimes made him appear pertinacious and even captious to men whose minds were of more slack fibre and whose habitual practice was compromise. In all his personal relations he was kindly, benevolent, and genial. His many friends mourn the loss of one to whom they were closely attached, while the whole profession is made the poorer by the death of an able and honest physician whose whole life was a protest against the authorised quackery of the ignorant, the pretentious, and the insincere."

Medical News.

EXAMINING BOARD IN ENGLAND BY THE ROYAL COLLEGES OF PHYSICIANS AND SURGEONS.—The following gentlemen passed the First Examination of the Board in the subjects indicated, under the "five years" regulations, viz.:—

Part I.—Chemistry and Physics:—

Adams, Ernest Beadon Dixon, St. Bartholomew's Hospital.
Adams, Henry Cyril, St. Bartholomew's Hospital.
Alderson, Percy Francis, Middlesex Hospital.
Ashley, Herbert Ernest, St. Bartholomew's Hospital.
Asten, Walter, Mason College, Birmingham.
Atkinson, George James Smith, St. Paul's School, West Kensington.
Austin, Elfred Chalmers, St. Mary's Hospital.
Aylen, Ernest Vaughan, London Hospital.
Baker, Dodington George Richard Sherston, University College, London.
Baker, William Lincoln, St. Mary's Hospital.
Barnes, George, St. Mary's Hospital.
Bartlett, Ernest John Reeve, King's College, London.
Bastian, William, University College, London.
Batchelar, Arthur, University College, London.
Baxter, Charles Thomas, Middlesex Hospital.
Beale-Browne, Thomas Richard, Guy's Hospital.
Beare, Joseph, Firth College, Sheffield.
Beley, Stanley, St. Thomas's Hospital.
Bell, John Cunningham, University College, London.
Bigg, Reginald, St. Bartholomew's Hospital.
Bignold, Henry Howe, Guy's Hospital.
Blake, Percy Ryall, London Hospital.
Bostock, Arthur Hastings, St. Bartholomew's Hospital.
Bradley, Richard Walter, St. Mary's Hospital.
Brangwin, Charles Harold, Guy's Hospital.
Braund, Henry, Guy's Hospital.
Brockwell, John Brocas Chambers, Guy's Hospital.
Brown, Thomas Warren, St. Bartholomew's Hospital.
Browne, Thomas Walker Stanley, Guy's Hospital.
Burd, Reginald Shirley, Mason College Birmingham.
Chalk, Charles Launder, St. Bartholomew's Hospital.
Challans, Frank, London Hospital.
Chaplin, Henry Ayrton, St. George's Hospital.
Churchill, John Aylward, St. George's Hospital.
Coleridge, Alfred, University College, Bristol.
Compton, Alwyne Theodore, St. Bartholomew's Hospital.
Compton, Maurice Winzar, St. Thomas's Hospital.
Cooke, Reginald Torriano, St. Bartholomew's Hospital.
Cory, Harold Myrie, Mason College, Birmingham.
Crompton, Richard Henry, University College, Liverpool.
Cunningham, John Francis, St. Thomas's Hospital.
Davies, Arthur Gerald Capel, Guy's Hospital.
Denny, Herbert Reginald Harry, Guy's Hospital.
Dismorr, Henry Bertram, Guy's Hospital.
Douglas, William Claughton, St. Bartholomew's Hospital.
Dudgeon, Leonard Stanley, St. Thomas's Hospital.
Edmonds, Charles John Ernest, St. Thomas's Hospital.
Edwards, Charles, Guy's Hospital.
Elliott, James Warner, St. Mary's Hospital.
Evans, Sydney James, Guy's Hospital.
Farquharson, Charles Henry, St. Mary's Hospital.

Fawssett, Basil, St. Thomas's Hospital.
Felton, Edgar Hall, Guy's Hospital.
Fouids, Francis Henry, St. Mungo's College, Glasgow.
French, Frank Austin, St. Mary's Hospital.
Garne, Sydney William, Charing-cross Hospital.
Goode, George Ernest, London Hospital.
Griffith, John Richard, London Hospital.
Gubbins, John Gaspard, St. Thomas's Hospital.
Harbinson, Robert James, St. Mungo's College, Glasgow.
Hart, John Hamilton, St. Thomas's Hospital.
Harvey, Joseph Frederick, Mason College, Birmingham.
Hawes, Ivon Henry Skipworth, St. George's Hospital.
Hawthorn, Henry William John, Mason College, Birmingham.
Heanley, Charles Montague, St. George's Hospital.
Hepper, Evelyn Charles, St. Bartholomew's Hospital.
Heseltine, Verner George, St. Bartholomew's Hospital.
Hicks, Charles Edward, Guy's Hospital.
Higgens, Hugh Arthur, Guy's Hospital.
Higson, Thomas, Owens College, Manchester.
Holland, Edward Torriano, St. Paul's School, West Kensington.
Hollick, Hubert Harry, Mason College, Birmingham.
Holmes, Willmot, St. Mary's Hospital.
Hubert, Edgar Hamilton, St. George's Hospital.
Humby, Harry Robinson, St. Bartholomew's Hospital.
Hutton, Ernest Wilberforce, St. Thomas's Hospital.
James, William Warwick, Middlesex Hospital.
Jupp, Ralph Tennyson, Mason College, Birmingham.
Last, Cecil Edward, St. George's Hospital.
Leech, Frederick Samuel, University College, London.
McClintock, John, King's College, London.
McQueen, Robert Martin, University College, Bristol.
Manning, Ernest John, St. Mary's Hospital.
Marrett, Henry Norman, St. Bartholomew's Hospital.
Mason, Herbert Alfred, Firth College, Sheffield.
Miles, William Percival, St. Bartholomew's Hospital.
Miller, John, Owens College, Manchester.
Morris, Herbert Edward, Guy's Hospital.
Navarra, Norman, Middlesex Hospital.
Newton, Arthur Charles Duncan, Bedford Grammar School.
Noakes, Fred., Charing-cross Hospital.
Nicholls, Percival Thomas, Middlesex Hospital.
Oates, James Christopher, Mason College, Birmingham.
Parker, Christian, London Hospital.
Parsons, Ernest Alsager, Mason College, Birmingham.
Paul, John Frederick, St George's Hospital.
Perkins, Philip Meyler, St. Bartholomew's Hospital.
Pern, Sydney, St. Thomas's Hospital.
Pinches, Henry Irving, St. Paul's School, West Kensington.
Pinches, Horace George, St. Thomas's Hospital.
Pinker, Henry George, St. Bartholomew's Hospital.
Pollock, Aubrey Keating Hallidav, St. Bartholomew's Hospital.
Pretty, Harold Cooper, University College, London.
Pugh, Arthur Bailey, St. Bartholomew's Hospital.
Randolph, William Henry, St. Bartholomew's Hospital.
Robertson, James Fenwick, St. Bartholomew's Hospital.
Rogers, Frederick Colin, St. Mary's Hospital.
Rodil, Baltasar, Guy's Hospital.
Scorah, Ernest John, Firth College, Sheffield.
Scott, Edward Fletcher, Guy's Hospital.
Shorland, George, Guy's Hospital.
Simpson, George Herbert, St. Mungo's College, Glasgow.
Simpson, John Edgar, University College, London, and King's College, London.
Smith, Francis Maylett, St. Paul's School, West Kensington.
Smith, Sydney Joseph, Charing-cross Hospital.
Smith, Thomas William, Charing-cross Hospital.
Softly, Alfred Ernest, St. Thomas's Hospital.
Speirs, George Benjamin Armes, St. Mary's Hospital.
Stanley, Edmund Hamilton Blake, University College, London.
Steen, Wilfred Alexander, London Hospital.
Symons, Vivian Hood, Mason College, Birmingham.
Takaki, Yoshihiro, St. Thomas's Hospital.
Talbot, Ashley West, Guy's Hospital.
Tayler, Henry Christopher, St. Mary's Hospital.
Thompson, Joseph Bernard, University College, London.
Thorne, Richard Thorne, St. Bartholomew's Hospital.
Turle, James Evan, University College, London.
Twort, Frederick William, St. Thomas's Hospital.
Tytheridge, Ainslie Burton, St. Paul's School, West Kensington.
Vickers, Thomas Hedley, St. Mary's Hospital.
Visger, Charles, University College, London.
Wagstaff, Charles Bertrand, Charing-cross Hospital.
Walker, Robert, St. Bartholomew's Hospital.
Ward, Oswald Erasmus, Mason College, Birmingham.
Waters, Alfred Charles Stanley, University of Cambridge.
Welch, Frederick Day, London Hospital.
Westlake, Bernard Beaumont, Guy's Hospital.
Whitehouse, Mervyn Turberville, Mason College, Birmingham.
Wilson, Richard Eldred, London Hospital.
Woodcock, Henry Cnadwick, St. Mary's Hospital.
Yule, Bransby, University College, London.

Part II.—Practical Pharmacy:—

Acland, Hugh Thomas Dyke, St. Thomas's Hospital.
Alderson, Francis Bellairs, Firth College, Sheffield.
Allen, Thomas Percival, St. Bartholomew's Hospital.
Anley, Frederick Eustace, Charing-cross Hospital.
Ashley, Herbert Ernest, St. Bartholomew's Hospital.
Barwell, Francis Reinagle, University College, London.
Bateman, Herbert Raymond, St. Thomas's Hospital.
Beaumont, Noel Charles, St. Bartholomew's Hospital.
Bell, Robert John, Charing-cross Hospital.
Bevan, Arthur, St. Thomas's Hospital.
Bingham, Frank Miller, St. Thomas's Hospital.
Bradley, Alwyn Hewett, Mason College, Birmingham.
Braund, Henry, Guy's Hospital.
Bullen, Edward Harry, St. Mary's Hospital.
Burrows, Harold, St. Bartholomew's Hospital.
Calvert, Herbert, St. Thomas's Hospital.
Chapman, Donald Poyntz, Charing-cross Hospital.
Chetwood, Thomas, London Hospital.
Churchill, John Aylward, St. George's Hospital.
Churton, John Gaitzkill, University College, Liverpool.
Collyns, John Moore, St. Bartholomew's Hospital.
Compton, Maurice Winzar, St. Thomas's Hospital.
Corbett, Sidney d'Alton, St. George's Hospital.
Cornish, Charles Vivian, St. Bartholomew's Hospital.
Cory, Harold Myrie, Mason College, Birmingham.
Danks, Walter Seymour, St. Bartholomew's Hospital.
Davey, John Bernard, Middlesex Hospital.
Davies, Daniel, St. Bartholomew's Hospital.
Davies, David Leighton, University College, London.
Davies, Enoch Howell, University College, Cardiff.
Dawson, Edwin Norman de Vere, St. Thomas's Hospital.
Denniston, William Edward, St. Thomas's Hospital.
Dixon, Godfrey Brookes, Charing-cross Hospital.
Doubble, Meredith Sedgwick, Charing-cross Hospital.
Douglas, William Claughton, St. Bartholomew's Hospital.
Drake-Brockman, Henry George, St. George's Hospital.
Eastment, Gerald Meade, Middlesex Hospital.
Ellery, Richard Frank, St. Bartholomew's Hospital.
Elwes, Frederick Fenn, Middlesex Hospital.
Evans, William, Otago University and London Hospital.
Faulkener, Erasmus Oakes, St. Mary's Hospital.
Fawssett, Wilfred, St. Thomas's Hospital.
Frost, Cecil Scarlett, St. Bartholomew's Hospital.
Gaff James, St. Thomas's Hospital.
Gandy, Thomas Hall, St. Bartholomew's Hospital.
Gilbert, Walter Raleigh, St. Thomas's Hospital.
Hagon, Albert, University College, Cardiff.
Hamilton, William Gavin, St. Bartholomew's Hospital.
Hancock, William Edwin Harry, University College, Bristol.
Harris, Herbert Stocker, St. Thomas's Hospital.
Harris, William Trengweath, St. Thomas's Hospital.
Hartley, John Dawson, St. Bartholomew's Hospital.
Harvey, Joseph Frederick, Mason College, Birmingham.
Hayes, Arthur Herbert, St. Bartholomew's Hospital.
Heath, Philip Maynard, University College, London.
Higson, Thomas, Owens College, Manchester.
Hodgsons Robert Edward, St. Mary's Hospital.
Hope, Walter Bayard, Guy's Hospital.
Hudson, Edmund, St. Thomas's Hospital.
Humphreys, Jack Edmund, Charing-cross Hospital.
Illius, Henry Warwick, St. Bartholomew's Hospital.
Illius, John Warwick, St. Bartholomew's Hospital.
Inman, William Sam, Firth College, Sheffield.
Jameson, Archibald Douglas, St. Thomas's Hospital.
Jones, Arthur Webb, St. Thomas's Hospital.
Jones, William Forsyth, Charing-cross Hospital.
Judson, Joseph Edward, Owens College, Manchester.
Jupp, Ralph Tennyson, Mason College, Birmingham.
Lamborn, William Alfred, Middlesex Hospital.
Leech, Frederick Samuel, University College, London.
Lees, Charlie, Charing-cross Hospital.
Lilley, Ernest Lewis, Charing-cross Hospital.
Lobb, Hubert Peché, St. Bartholomew's Hospital.
Law, George Harvey, St. Bartholomew's Hospital.
McLachlan, Arthur Ronald, Guy's Hospital.
McLeod, James Alexander, London Hospital.
Martin, Malcolm Murcott, St. Bartholomew's Hospital.
Mayne, William Boxer, University College, London.
Merry, Edward, London Hospital.
Mitchell, Talbot Carter, Yorkshire College, Leeds.
Morley, Arthur Solomon, St. George's Hospital.
Navarra, Norman, Middlesex Hospital.
New, John Sherwood, University College, London.
Nunn, John Wilfred, St. Bartholomew's Hospital.
Nutt, Harold Rothery, St. Mary's Hospital.
O'Hea, John, St. Bartholomew's Hospital.
Olivey, John Michael Abraham, St. Thomas's Hospital.
Parsons, Ernest Alsager, Mason College, Birmingham.
Passmore, William Henry, Charing-cross Hospital.
Peck, William Edward, University College, London.
Perrin, Thomas, St. Thomas's Hospital.
Pitts, Arthur Gentry, Charing-cross Hospital.
Pritchett, George William Morris, University College, London.
Quinby, Frank Gray, University College, Liverpool.
Reid, Archibald Douglas, King's College, London.
Rodil, Juan José, Guy's Hospital.
Russell-Risien, Ernest, St. Bartholomew's Hospital.
Sanders, James Herbert, London Hospital.
Scorah, Ernest John, Firth College, Sheffield.
Scott, Henry Martin, Charing-cross Hospital.
Scott, Sydney Richard, St. Bartholomew's Hospital.
Serase, James John Sheat, St. Bartholomew's Hospital.
Smith, William Christian Baumgarten, St. Bartholomew's Hospital.
Softly, Alfred Ernest St. Thomas's Hospital.
Sprague, Francis Henry, St. Mary's Hospital.
Stevens, Stanley, St. Bartholomew's Hospital.
Stone, Gerald William, St. Bartholomew's Hospital.
Stratford, Howard Blenheim Martin, Oxford University.
Takaki, Yoshihiro, St. Thomas's Hospital.
Thomas, Harold Sebert, St. Bartholomew's Hospital.
Trumper, William Arthur, St. Mary's Hospital.
Turner, Walter Edward, St. Mary's Hospital.
Vaughan, Arthur Llewellyn, St. Bartholomew's Hospital.
Walker, Lewis Augustus, St. Bartholomew's Hospital.
Walters, Charles Ferrier, University College, Bristol.
Waters, James, Middlesex Hospital.
Wells, Albert John Walton, St. Bartholomew's Hospital.
Williams, Gwilym Wynt Steuart, St. Bartholomew's Hospital.
Wirgman, Charles Wynn, University College, London.
Woodforde, Robert Edmund Heighes, St. Bartholomew's Hospital.
Wood-Hill, Henry Gilbert, St. Bartholomew's Hospital.
Yule, Bransby, University College, London.

Part III.—Elementary Biology:—

Alcock, William, Firth College, Sheffield.
Alderson, Percy Francis, Middlesex Hospital.
Anchumuty, Compson Henry, Westminster Hospital.
Ashmore, Arthur, Yorkshire College, Leeds.
Austen, Cecil Cress, Westminster Hospital.
Baker, Arthur Russell, St. Bartholomew's Hospital.
Baxter, Charles Thomas, Middlesex Hospital.
Bennett, Charles Harold, St. Mary's Hospital.
Braund, Henry, Guy's Hospital.
Brockwell, John Brocas Chambers, Guy's Hospital.
Churchill, John Aylward, St. George's Hospital.
Cunningham, John Francis, St. Thomas's Hospital.
D'Aguilar, John Burton Stockwell, University College, Bristol.
Daly, Frederick James Purcell, London Hospital.
Davies, David Morgan, St. Mungo's College, Glasgow.
Davis, Alexander Montague, Mason College, Birmingham.
Denny, Herbert Reginald Harry, Guy's Hospital.
Fagan, Charles Horace, St. Paul's School, West Kensington.
Foulds, Francis Henry, St. Mungo's College, Glasgow.
Fowler, Edwin Samuel George, Yorkshire College, Leeds.
Freear, Alexander, St. Mary's Hospital.
Glaze, Thomas Horace, Mason College, Birmingham.
Gomez, Francisco José, King's College, London.
Griffith, John Richard, London Hospital.
Hall, Robert William Basil, Guy's Hospital.
Harbinson, Robert James, St. Mungo's College, Glasgow.
Hawes, Colin Sadler, St. Bartholomew's Hospital.
Haydon, William Chatterley, St. Mary's Hospital.
Heanley, Charles Montague, St. George's Hospital.
Higgens, Hugh Arthur, Guy's Hospital
Hughes, Frank Percival, University College, Bristol.
Hutton, Ernest Wilberforce, St. Thomas's Hospital.
James, Charles Willmott Wanklyn, University College, Bristol.
Jefferiss, Frederick Burroughs, King's College, London.
Jones, Frederick John Felix, Guy's Hospital.
Lakeman, Jasper, London Hospital.
Lawson, James Ward, Charing-cross Hospital.
Leech, Frederick Samuel, University College, London.
Leggatt, Claude Edward Heisch, St. Mary's Hospital.
Lister, Alfred Ernest John, St. Bartholomew's Hospital.
McClintock, Guy Reginald, St. Bartholomew's Hospital.
Mandy, Percy Stephen, Guy's Hospital.
Mayer, Thomas Frederick Gisborne, London Hospital.
Moss Blundell, Cuthbert Blundell, St. Thomas's Hospital.
Murdoch, Horace Thomas Thorns, Yorkshire College, Leeds.
Nicholls, Percy Thomas, Middlesex Hospital.
Oliver, Arthur Cardell, University College, Cardiff.
Parkinson, Harold Raby, Owens College, Manchester.
Paul, John Frederick, St. George's Hospital.
Peirce, Thomas James, St. George's Hospital.
Pern, Sydney, St. Thomas's Hospital.
Reardon, Arthur Francis, St. Thomas's Hospital.
Rodil, Baltasar, Guy's Hospital.
Rutherford, William Harper, St. Thomas's Hospital.
Seager, Frank Randolph, Mason College, Birmingham.
Segreda, Francisco Arturo Guy's Hospital.
Sheehan, Michael, Queen's College, Cork.
Simpson, George Herbert, St. Mungo's College, Glasgow.
Speers, William Gordon, St. Mary's Hospital.
Stanley, Edmund Hamilton Blake, University College, London.
Stevens, Warwick Alan George, Guy's Hospital.
Stokes, Percy Southwell, Firth College, Sheffield.
Thwaites, Cyril Evered, St. Mary's Hospital.
Thwaites, Harry, London Hospital.
Townroe, Eugene Dunbar, St. George's Hospital.
Turner, Charles Harold, St. Bartholomew's Hospital.
Waters, Alfred Charles Stanley, Cambridge University.
White, Charles Vaughan, St. Thomas's Hospital.
Whitehead, Arthur Ernest, Firth College, Sheffield.
York, Thomas, Westminster Hospital.

Part IV.—Elementary Anatomy:—

Austen, Cecil Cress, Westminster Hospital.
Barnes, George, St. Mary's Hospital.
Brangwin, Charles Harold, Guy's Hospital.
Brown, Thomas Warren, St. Bartholomew's Hospital.
Capper, Harold Selwyn, University College, London.
Carlyon, Arthur Farrington, Middlesex Hospital.
Clayton, John Cecil, University College, Bristol.
Crawley, Herbert Edward, Oxford University.
Cross, Gerald Coneybeare, Middlesex Hospital.
Daly, Frederick James Purcell, London Hospital.
Davies, David Morgan, St. Mungo's College, Glasgow.
Douglas, William Claughton, St. Bartholomew's Hospital.
Durance, William Arthur, Westminster Hospital.
Edwards, Charles, Guy's Hospital.
Esser, Samuel Jonathan David, London Hospital.
Etheridge, Charles Edward, Middlesex Hospital.
Evans, William, Otago University and London Hospital.
Facey, Reginald Ambrose, St. Mary's Hospital.
Flint, Harold Edwards, St. Bartholomew's Hospital.
Forbes, Cyril Donald Edward, St. George's Hospital.
Foulds, Francis Henry, St. Mungo's College, Glasgow.
Gould, Reginald, London Hospital.
Gomez, Francisco José, King's College, London.
Green, Sydney Balch, St. Bartholomew's Hospital.
Halliday, John Rutherford, London Hospital.
Harris, John, University of Sydney, New South Wales.
Harris, Thomas Arthur Ball, Firth College, Sheffield.
Hawkes, Alfred Ernest Underwood, University College, Liverpool.
Hayes, Arthur Herbert, St. Bartholomew's Hospital.
Hemstead, Henry, University College, Bristol.
Hobbs, Albert Remington, St. Mary's Hospital.
Holmes, Wilmot, St. Mary's Hospital.
Hudson, Edmund, St. Thomas's Hospital.
Jones, Frederick John Felix, Guy's Hospital.
Judson, Joseph Edward, Owens College, Manchester.
Kerfoot, Stanley James, London Hospital.
Lakeman, Jasper, London Hospital.
Lawson, James Ward, Charing-cross Hospital.
Leclézio, George Joseph Alexis, St. Bartholomew's Hospital.
Leech, Frederick Samuel, University College, London.
Mansell, Thomas, St. Thomas's Hospital.
Martin, John Lemon, St. Mary's Hospital.
Page, Shirley, Mason College, Birmingham.
Palmer, William Grimes, Guy's Hospital.
Panckridge, William Panckridge, Middlesex Hospital.
Pick, Lawrence, St. George's Hospital.
Pinker, Henry George, St. Bartholomew's Hospital.
Quinby, Frank Gray, University College, Liverpool.
Raven, Eustace, St. Thomas's Hospital.
Reardon, Arthur Francis, St. Thomas's Hospital.
Roche, Ivan Joseph, Charing-cross Hospital.
Rockwood, David Pratt, University College, London.
Scott, Claude Sigismund, St. Bartholomew's Hospital.
Shorland George, Guy's Hospital.
Soderberg, John Emil, Westminster Hospital.
Stedman, Percy Taylor Humphry, University College, London.
Sykes, Walter, Owens College, Manchester.
Thompson, Cecil Charles Brandon, St. Bartholomew's Hospital.
Thwaites Cyril Evered, St. Mary's Hospital.
Thwaites, Harry, London Hospital.
Walker, Robert, St. Bartholomew's Hospital.
Watson, William Bertram, St. Mary's Hospital.
Weston, Herbert Ernest, St. George's Hospital.
Woodforde, Robert Edmund Heighes, St. Bartholomew's Hospital.

SOCIETY OF APOTHECARIES OF LONDON.—The following candidates passed in—

Surgery.—A. F. Blake, London Hospital; G. W. Brown, St. Thomas's Hospital; J. A. Clough, Leeds; R. G. Jones, London Hospital; W. J. Lubeck, Madras; A. R. McCullagh, Charing-cross Hospital; and H. S. Maw, Bristol and St. Bartholomew's Hospital.

Medicine, Forensic Medicine, and Midwifery.—F. A. Blatchford, St. Mary's Hospital; J. A. Clough, Leeds; A. D. Parr Dudley, University College; R. E. T. Ingram, Guy's Hospital; H. S. Maw, Bristol and St. Bartholomew's Hospital; U. W. N. Miles, King's College; D. Pettigrew, Glasgow and Sheffield; and S. J. Wakeham, Charing-cross Hospital.

Medicine and Forensic Medicine.—J. G. Owen, Charing-cross Hospital; A. H. Wade, St. Bartholomew's Hospital; and R. P. H. Whitmarsh, St. Thomas's Hospital.

Medicine.—G. Lowsley, St. Bartholomew's Hospital.

Forensic Medicine and Midwifery.—D. D. Stewart, Liverpool; and T. W. Wakem, Charing-cross Hospital.

Forensic Medicine.—R. G. Jones, London Hospital; S. E. H. Martin, Royal Free Hospital; and M. White, St. Thomas's Hospital.

Midwifery.—O. W. Gange, University College; D. C. Kemp, University College; and J. Watts, Manchester.

To Messrs. Blake, Blatchford, Brown, Clough, Dudley, Ingram, Jones, Lowsley, McCullagh, Maw, and White was granted the diplomas of the Society entitling them to practise Medicine, Surgery, and Midwifery.

MANY interesting papers will be read at the approaching nineteenth meeting of the American Dermatological Association to be held at Montreal on Sept. 17th, 18th, and 19th. The proceedings will commence with an address by the President (Dr. S. Sherwell of Brooklyn), after which the first day's subjects will be Angiokeratoma of the Scrotum, Raynaud's Disease of the Ears, cases of Hydroa Vacciniforme and Bromide Eruption, a discussion on the Usefulness of Electrolysis in Dermatology, and the Relation of the Epitrichial Layer of the Epidermis to Ichthyosis Congenita. Amongst the numerous subjects announced for the two succeeding days are papers on the Treatment of Erysipelas and on Alopecia.

A QUESTION OF "ISOLATION."—The people of Elson, a village near Portsmouth, are much exercised at a method of "isolation" which certainly has novelty to recommend it. The urban district council requires a site for an isolation hospital, and the action of their committee has opened an old sore. Seven or eight years ago the now deceased local board required a hospital and pitched on this identical site at Elson. A Local Government Board inspector duly made inquiries, and the site was purchased. In 1893 several cases of small-pox occurred, and tents were erected for their accommodation. This brought the military authorities to the fore; they promptly declared Elson out of bounds and hinted at closing the forts in the parish. Such was the local feeling—the tents being "at the very doors" of the people—that without petition the board abandoned the site and advertised for another. The committee of the Gosport and Alverstoke urban district council, which district includes Elson, now recommend, however, that it be once more requisitioned for isolation purposes. Nearly every inhabitant of the village was present at the meeting of protest, and they have unanimously petitioned against a hospital "within a few yards of their doors." The matter, so far as this authority is concerned, is in an initial stage, but the question affects not only a semi-rural but a naval and military population.

VACCINATION AND REVACCINATION.—We are glad to see that the following document, signed by the vaccination officers of the Whitechapel Union, has been posted throughout the district:—"The Medical Department of the Privy Council advise that all persons who have been vaccinated in infancy should, as they approach adult life, be revaccinated, and the public are therefore earnestly requested to avail themselves of this great and simple safeguard against smallpox. The best time for revaccination is between fifteen and eighteen years of age. But if there is a prevalence of smallpox, or if individuals from personal circumstances are likely to have chances of infection the age of fifteen should not be waited for, especially in the case of young persons whose marks of vaccination are not satisfactory. In circumstances of special danger, everyone past childhood on whom revaccination has not been successfully performed should, without delay, be revaccinated. The Royal College of Physicians also strongly recommends that all persons who have passed the age of puberty and have not been revaccinated since, should be revaccinated. It will thus be seen that it is considered by the two highest medical authorities in the country that every adult person should be revaccinated." We quote this as given in the *Echo*, which calls the notice an "extraordinary document."

MORLEY HOUSE SEASIDE CONVALESCENT HOME FOR WORKING MEN.—The half-yearly meeting of the board of governors of this institution, which is situated at St. Margaret's Bay, near Dover, was held on the 28th inst., in the Memorial Hall, Farringdon-street, Mr. J. A. Dickinson presiding. The annual report and balance-sheet showed that during the past year 798 patients had been received, an increase of 132 over the previous twelve months. A gratifying feature of the report was that in addition to an increase in the subscriptions and donations increased awards had also been received from the Hospital Sunday and Saturday Funds. The report notes with satisfaction the increased favour the Home is obtaining with agencies, there being now associated with the Morley Home (either in connexion with single beds or wards) the following: the City Police, G.P.O. (for London postmen), Gough and Sons, Beckenham and Penge Societies, Hearts of Oak Society, Governors of the Bank of England, Church of England Temperance Benefit Society, and the Improved Industrial Dwellings Company. An account of the opening of the Caxton Wing in May last by the Hon. W. F. D. Smith is also given. The Home is free from debt, but the number of patients seeking admission is growing so rapidly that some steps must be taken in the near future to increase the accommodation. The report was adopted, and the proceedings closed with a vote of thanks to the chairman.

CHARITABLE BEQUESTS.—The *Daily News* states that estate duty has been paid on £259,557 as the value of the personal estate of Mr. William Berry, of 525, Rochdale-road, Manchester, and of Parklands, Durham Massey, Chester, blacking manufacturer, who died on June 8th last. He bequeaths to the Manchester and Salford Street Children's Mission £500; the Altrincham and Bowdon Provident Society at Altrincham, £500; the Altrincham Hospital and Provident Dispensary, £1000; the Manchester Clinical Hospital for Women and Children, £1000; the Manchester and Salford Sick Poor and Private Nursing Institution, £1000; the Manchester Hospital for Consumption and Diseases of the Throat, £1000; the Manchester Royal Eye Hospital, £1000; the Manchester Institution for Diseases of the Ear, £1000; the Society for the Prevention of Cruelty to Children, £1000; Mr. Barnardo's Homes and Missions, Stepney-causeway, £1000; the Manchester and Salford District Provident Society, £1000; Henshaw's Blind Asylum, Old Trafford, £1000; the Southport Convalescent Hospital and Sea Bathing Institution, £2000; the Manchester General Hospital and Dispensary for Sick Children, £2000; the Old Trafford Schools for the Deaf and Dumb, £2000; the Royal National Lifeboat Institution, £2000; the Northern Counties Hospital for Incurables, Heaton Mersey, £2000; the Salford Royal Hospital, £1000; the Boys and Girls' Homes and Refuge and Children's Aid Society, £3000; the Ancoats Hospital, Manchester, £5000; the St. Mary's Hospital and Dispensary, £5000; the Manchester City Mission, £5000; and the Manchester Royal Infirmary and Dispensary, £10,000. All the residue of his property Mr. Berry leaves to his brother Thomas.

DR. JOHN HAMILTON has received the grant for efficient vaccination in the Gresley district of the Burton-on-Trent Union for the ninth time.

DR. FARRAR, Chatteris, has been awarded a gratuity of 5 guineas for efficient vaccination in his district.

THE formal presentation of the Hodgkins Prize for the discovery of argon is postponed owing to the absence from England of Professor Ramsay.

POST-MORTEM EXAMINATIONS AND WORKHOUSE MEDICAL OFFICERS.—At Tuesday night's meeting of the Strand board of guardians a question of some importance to medical officers of metropolitan workhouses was discussed, on the proposition of the chairman (Mr. Thomas Hill), for the adoption of the School Visiting Committee's recommendation, that in future, when the coroner ordered post-mortem examinations to be held on the bodies of persons who died in the Bear-yard casual wards (Drury-lane), the workhouse and schools at Edmonton, or other buildings under the control of the guardians, the necropsy should be made by an independent medical man, and not by any officer engaged in the service of the board. Whatever might be the professional usage in private practice amongst medical men, he did not think the salaried officials of public institutions like workhouses, asylums, gaols, &c., should be allowed to conduct these post-mortem investigations into the cause of death of persons whom they attended in life. He disclaimed any intention on the part of the committee of casting any slight upon the medical officers at their schools and workhouses or other institutions; but it was to prevent any suspicion of scandal which might in some cases attach to the board in allowing their own paid officer to make post-mortem examinations in cases in which he might be charged with having some personal or professional interest.—A guardian observed that the change suggested by the committee was now in force in many large metropolitan institutions, and would soon be put into action in all the London workhouses, asylums, &c.—On the motion of Mr. Robert Walker, seconded by Mr. T. Prescott, M.R.C.S. Eng., it was agreed that, as the subject was of very great importance, affecting the medical officers of the Strand and other London unions, it should be remitted to the General Purposes Committee for consideration and report.

Parliamentary Intelligence.

NOTES ON CURRENT TOPICS.

The Water-supply of East London.

THE vestries in the East-end of London have addressed the President of the Local Government Board asking him to institute a full inquiry into the water-supply.

The Tuberculosis Commission.

Mr. Lees Knowles has given notice of a motion for the reappointment of the Royal Commission on Tuberculosis and the extension of the scope of its inquiry, so that it may further inquire and report on administrative procedures available for reducing the amount of tuberculous material in the food supplied by animals to man. The Government having appropriated all the time, there is practically no chance of the motion being dealt with during the present short session.

Inspectors of Meat.

A Parliamentary return is being prepared showing the number of officials employed as meat inspectors in the leading cities and towns in England and Scotland, the date of their appointment, their qualifications, their vocations prior to receiving appointment, and where such officials act as meat inspectors only or hold any office of emolument in a department other than that supervised by the medical officer of health.

HOUSE OF COMMONS.

THURSDAY, AUG. 22ND.

Disease in Imported Milk.

Admiral Field asked the President of the Board of Agriculture whether he could take any steps under the law as it now stood to protect this country against the importation of milk from countries where foot-and-mouth disease, pleuro-pneumonia, or other infectious diseases exist, which were liable to be communicated not only to cattle, but to human beings, and were consequently dangerous to public health; and, if the existing law was defective in this respect, would he ask for further Parliamentary powers in the ensuing session to enable him to cope with this acknowledged evil.

Mr. Walter Long replied that if any danger to the health of animals

should arise by reason of the importation of milk he thought he should be able to meet it by the powers given under the Diseases of Animals Act. Questions affecting the health of human beings, however, were for the Local Government Board to consider, not for his department.

On the following day Admiral Field addressed his question to the President of the Local Government Board, and Mr. Chaplin replied that he had no power to prevent the importation of milk from countries where infectious diseases existed, but the matter was of importance, and would not escape his attention.

The Water-supply in East London.

Mr. James Stuart addressed a number of questions on this subject to the President of the Local Government Board.

Mr. Chaplin, in the course of his replies, said he was informed by the East London Water Company that the increase in the quantity of water supplied during the month of June last, as compared with the supply during the corresponding month in the two preceding years, was due (1) to an increase of 36,000 in the population since 1893; (2) to the fact that a large number of pipes belonging to the consumers were burst, 50,000 burst pipes having been found between April 20th and June 29th—in many instances the necessary repairs had not yet been carried out; and (3) to the abnormally dry weather of May and June, when garden watering was a source of great waste. The engineer of the company stated that all pipes belonging to the company within the county of London which were damaged by frost or otherwise were replaced or made good by April 8th. He (Mr. Chaplin) had communicated with Major-General Scott, the Water Examiner under the Metropolis Water Act, and he informed him that he had no information which would lead him to doubt the accuracy of the statements of the Company in the matter. He had made inquiries of the several water companies in London as to the number of days' supply represented by the capacity of their storage reservoirs for unfiltered water. The effect of the replies was: East London Water Company, an average of about seventeen days' supply of Lea water; West Middlesex, six and a third days' supply; Grand Junction Company, three and a half days' supply; New River Company, four or five days' average supply; Southwark and Vauxhall, four days' supply; and Chelsea, thirteen and a half days' supply.

Lunacy in Ireland.

Mr. Gerald Balfour, Chief Secretary for Ireland, replying to a question put by Mr. Kenny, said that the increase in the number of admissions of lunatic patients into institutions was attributed by the Lunacy Commissioners in great measure to causes other than an increase of the disease of insanity in its more serious forms. And in their last report they point to the continuously increasing proportion of old-age admissions as confirming this view. At present he had no well-digested information with respect to foreign countries, and was not satisfied that anything would be gained by an international commission. He would, however, consider the matter during the recess.

Local Authorities and Sanitation.

Mr. Chaplin, in answer to Mr. Yerburgh, said that the practice of the Local Government Board had been to refer to the reports of the Assistant Commissioners in connexion with the examination of the annual reports of medical officers of health, and where the reports of the Assistant Commissioners had contained statements respecting cottage accommodation the Board had communicated with the local authority on the subject when it had appeared to them that advantage would be likely to result from such communication. Apart, however, from the reports of the Assistant Commissioners, the Board were accustomed upon the materials furnished by the annual reports of the medical officers of health to draw the attention of the local authorities to matters of sanitary importance in connexion with the housing of the working classes.

Small-pox in London: the Salvation Army Shelters.

Mr. Chaplin said, in reply to a question, that his attention had been called to a report of the proceedings instituted by the vestry of St. George, Southwark, with regard to alleged overcrowding of the Salvation Army shelter in Blackfriars-road. He understood that the case was adjourned and no decision had yet been given by the magistrate in the matter, and he thought therefore that he could not properly make any observations with reference to it. The Local Government Board were aware that a considerable number of cases of small pox had occurred amongst persons who had been received in the Salvation Army shelters. In the early part of last year the Board directed an inquiry as to the arrangements in connexion with these shelters, especially as regards dealing with cases of infectious disease, and at the beginning of the present month he requested that further inquiries should be made by one of the medical inspectors of the Board as to precautionary measures taken at the shelters with a view to the detection of cases of small-pox among the persons admitted. The general result of the inquiry would appear to be that the Salvation Army authorities realised their responsibility in the matter of small pox, and were anxious to do all in their power to prevent the spread of that disease by means of the shelters. The Local Government Board were not empowered to enforce a medical inspection. Any powers for this purpose, apart from those which might be exercised by the medical officer of health, could only be obtained by legislation. The subject had been receiving his attention, and the question as to an alteration of the law with regard to these and other similar institutions would be considered by him.

FRIDAY, AUG. 23RD.

The Clothing of the Metropolitan Police.

Colonel Howard Vincent asked the Secretary of State for the Home Department whether he would consider, in conjunction with the Commissioner of Police for the Metropolis, the possibility of reducing the issue of tunics to sergeants and constables to one in two years, and supplying in the alternate year a smart serge jacket for use during ordinary day duty in the summer and by police engaged in office or in-door work, as in many provincial forces, and possibly with a lighter headdress than the felt helmet.—Sir Matthew White Ridley replied that the question of supplying the metropolitan police with a lighter headdress and clothing for summer wear had been repeatedly before his predecessors, and the result of their consideration of the matter had invariably been a decision that, on medical and other grounds, the change would be undesirable. He should be willing, however, to give the matter his consideration and to confer with the Commissioner of Police.

Imported Frozen Meat.

Mr. Walter Long said, in reply to Mr. Dunbar Barton, that representations had been made to the Board of Agriculture that there was not proper inspection of the cattle slaughtered in Australia for export as frozen meat to this country, and information was obtained as to the measures taken in certain of the Australian colonies to prevent the export of meat unfit for human food. The information was communicated to the Local Government Board, with whom it would rest to consider whether any further measures for the security of human health in this country were necessary and practicable.

MONDAY, AUG. 26TH.

Vaccination Commission Report.

Mr. Chaplin said in reply to a question that he caused a letter to be addressed to the Royal Commission on Vaccination on Aug. 13th, in which the commissioners were informed that the Local Government Board were strongly impressed with the urgent importance of the final report being made at as early a date as possible. He was informed that the commissioners were now preparing their final report, which would be presented at the earliest possible moment, but he regretted that he was unable to give any more definite information.

Dispensary Doctors in Ireland.

Mr. Abraham asked the Chief Secretary to the Lord Lieutenant of Ireland whether the Local Government Board sanctioned dispensary doctors having the dispensary in their own houses in towns where premises suitable and convenient to the public could be obtained; whether under these circumstances they would sanction a board of guardians surrendering an existing dispensary held on lease at a reasonable rent in order to accommodate the doctor, five minutes' walk being saved him; and whether, in the interests of the ratepayers, they would refuse sanction to such an arrangement if brought under their notice.

Mr. Gerald Balfour replied that the provision of dispensary accommodation devolves upon boards of guardians under Section 8 of the Poor-law Relief (Ireland) Act, 1851, and it is not the practice of the Local Government Board to interfere with the guardians in the selection of premises unless satisfied that the premises are inconveniently situated or otherwise unsuitable for the sick poor seeking medical relief. With regard to paragraphs 2 and 3 of the question the Local Government Board can express no opinion as to the action they might feel called upon to adopt until all the facts of the particular case are placed before them.

Nursing in Workhouse Infirmaries.

In the course of the debate in Committee of Supply on the vote for the Local Government Board, several members called attention to this important subject. Mr. Chaplin, speaking for the Board, admitted that the regrettable cases which had occurred in workhouses of patients suffering from illness owing to inefficient and inferior nursing ought to receive their careful attention. He had already made inquiries on the subject, and he understood that at the present time there was in existence a Workhouse Nursing Association, by means of which nurses were trained and also recommended. He understood, moreover, that many boards of guardians subscribed to the association. The Local Government Board attached great importance to the work of the association, and also to the nursing duties in workhouses by trained nurses. It was also the policy of the Board to discourage as far as possible the nursing of patients by pauper nurses. This had been the general policy of the department, and it was one which he hoped to continue to carry out in the future, realising how important it was that the nursing establishment connected with workhouses should be thoroughly reformed. Sir Walter Foster, the Parliamentary Secretary to the Local Government Board under the late Administration, also took part in the discussion, assuring the House that of late years the subject of the nursing of the sick poor had received a great deal of attention from local authorities in different parts of the country, and that the Local Government Board had not been idle with regard to it.

TUESDAY, AUG. 27TH.

Ventilation of the London Underground Railways.

Mr. Ritchie, President of the Board of Trade, questioned by Mr. Weir, declined to bring in a Bill next session dealing with the ventilation of the underground railways in London. At another sitting of the House Mr. Ritchie had said that if the companies concerned were to consult their own interests they would take steps themselves to deal with what was a subject of general complaint by those who travel on the railways.

The Gresham University Commission.

Mr. Balfour informed the House that legislation with regard to the report of the University of London (Gresham) Commission would be impossible in the course of the present session of Parliament, and he was unable to say what legislative action would be taken by the Government.

Appointments.

Successful applicants for Vacancies, Secretaries of Public Institutions, and others possessing information suitable for this column, are invited to forward it to THE LANCET Office, directed to the Sub-Editor, not later than 9 o'clock on the Thursday morning of each week, for publication in the next number.

BROWNE, J. WALTON, M.D. Q.U.I., has been reappointed Surgeon to the Royal Hospital, Belfast.

BYERS, PROFESSOR, M.D. Q.U.I., has been reappointed Physician for Diseases of Women to the Royal Hospital, Belfast.

CONDLER, G., has been appointed Senior Obstetric House Physician to St. Thomas's Hospital.

CONFORD, G. J., M.B., B.Ch. Oxon., has been appointed Assistant House Surgeon to St. Thomas's Hospital.

CROUCH, H. C., L.R.C.P., M.R.C.S., has been appointed Assistant House Surgeon to St. Thomas's Hospital.

DANIEL, E. G. C., L.R.C.P., M.R.C.S., has been appointed Resident House Physician to St. Thomas's Hospital.

DAVIS, H. J., M.B., B.C. Cantab., has been appointed House Surgeon to St. Thomas's Hospital.

DIXON, J. L. B., M.B., B.S., has been appointed Senior Assistant Medical Officer at the Workhouse, Manchester, vice McDougall, resigned.

ETCHES, C. A., L.R.C.P. Edin., has been appointed Medical Officer of the Helperby District, Easingwold Union.

HOGARTH, R. G., M.R.C.S. Eng., L.R.C.P. Lond., has been appointed Senior Resident Medical Officer to the General Hospital, Nottingham, vice Waring, resigned.

HOME, A. L., L.R.C.P., M.R.C.S., has been appointed House Surgeon to St. Thomas's Hospital.

JENKINS, T. J. P., M.R.C.S. Eng., L.R.C.P. Lond., has been appointed Medical Officer of the South-Eastern District, Freebridge Lynn Union.

JENNER, L. L., M.B., B.Ch. Oxon., has been appointed Resident House Physician to St. Thomas's Hospital.

LAYTON, F. G., L.R.C.P., M.R.C.S., has been appointed Non-resident Physician to St. Thomas's Hospital.

NELSON, JOSEPH, M.D. Q.U.I., L.R.C.S.I., has been reappointed Ophthalmic Surgeon to the Royal Hospital, Belfast.

PRAIN, J. L., L.R.C.P., M.R.C.S., has been appointed Assistant House Surgeon to St. Thomas's Hospital.

ROSS, RICHARD, M.D. St. And., L.R.C.S.I., has been reappointed Physician to the Royal Hospital, Belfast.

SALT, A. D. H., L.R.C.P. Edin., has been appointed Medical Officer of the Sturry District, Blear Union.

SAUNDERS, A. L., M.R.C.S. Edin., L.R.C.P. Lond., has been appointed Medical Officer of the Workhouse and the Eastern District, Freebridge Lynn Union.

SAUNDERS, E. A., M.B., B.Ch. Oxon., has been appointed Junior House Physician to St. Thomas's Hospital.

SECCOMBE, P. J. A., L.R.C.P., M.R.C.S., has been appointed Non-resident House Physician to St. Thomas's Hospital.

SMITH, J. LORRAIN, M.D. Edin., has been appointed Pathologist to the Royal Hospital, Belfast.

SMITH, R. STRAFFORD, M.D. R.U.I., has been reappointed Assistant Physician to the Royal Hospital, Belfast.

STEELE, W. C., M.D., M.R.C.P., has been appointed Medical Officer to the Hexham Union, and Public Vaccinator and Medical Officer to the West Allandale Medical Society.

STONE, N. G., M.B., M.Ch. Oxon., has been appointed House Surgeon to St. Thomas's Hospital.

STYLE, F. W., M.R.C.S. Eng., L.R.C.P. Lond., has been appointed Medical Officer of the South Brent District, Totnes Union.

THURSTON, E. O., L.R.C.P., M.R.C.S., has been appointed House Surgeon to St. Thomas's Hospital.

WALLACE, L. A. R., M.B., B.Ch. Oxon., has been appointed Assistant House Surgeon to St. Thomas's Hospital.

Vacancies.

For further information regarding each vacancy reference should be made to the advertisement (see Index).

ASTON UNION.—Resident Assistant Medical Officer. Salary £100 per annum, with furnished apartments, rations, washing, &c.

CAMBERWELL INFIRMARY.—Assistant Medical Officer. Two and a half guineas weekly, with board and lodging.

CITY OF LONDON HOSPITAL FOR DISEASES OF THE CHEST, Victoria-park, E.—House Physician for six months. Board and residence, and allowance for washing provided.

DERBYSHIRE ROYAL INFIRMARY, Derby.—Clinical Assistant for six months.

GENERAL HOSPITAL, Nottingham.—House Physician for two years. Salary £100, rising £10 a year to £120. Also Assistant House Surgeon for six months. Board, lodging, and washing in the hospital provided.

GREAT YARMOUTH HOSPITAL.—House Surgeon on Oct. 3rd next. Salary £90 per annum, with board and lodging.

HORNCASTLE RURAL DISTRICT COUNCIL.—Medical Officer of Health. Salary at the rate of £240 per annum, inclusive of all expenses.

LANCASTER INFIRMARY AND DISPENSARY.—House Surgeon (unmarried). Salary £80, with residence, board, attendance, and washing.

MANCHESTER CLINICAL HOSPITAL FOR WOMEN AND CHILDREN, Parkplace, Cheetham-hill-road.—House Surgeon. Salary £80 per annum, with apartments and board. Applications to Mr. H. Teague, Secretary, 33, Barton-arcade, Manchester.

METROPOLITAN HOSPITAL, Kingsland-road, N.E.—House Physician, House Surgeon, Assistant House Physician, and Assistant House Surgeon. Appointments for six months. The House Physician and House Surgeon will each receive a salary at the rate of £60 a year.

NORTHAMPTON GENERAL INFIRMARY.—Dresser for six months.

NORTH CAMBRIDGESHIRE HOSPITAL, Wisbech.—House Surgeon in October next, also to undertake the Secretary's duties. Salary £130 per annum, with detached house, furnished, coals, gas, and water provided.

ROYAL FREE HOSPITAL, Gray's-inn-road, W.C.—Senior Resident Medical Officer. Salary £100 per annum, with board, residence, and washing.

ROYAL UNITED HOSPITAL, Bath.—House Surgeon for one year. Salary £50, with board, lodging, and washing.

ST. BARTHOLOMEW'S HOSPITAL.—Assistant Physician.

ST. LEONARD, Shoreditch.—Resident Assistant Medical Officer. Salary £120 per annum, rising £10 annually to £150 per annum, with rations, furnished apartments, and washing in the Infirmary.

THE CHILDREN'S HOSPITAL, Temple-street, Dublin.—Resident Surgeon. Salary 50 guineas, with rooms, fire, light, and attendance.

THE COUNCIL FOR THE BOSTON RURAL DISTRICT.—Medical Officer of Health for the District for five years. Salary £110 inclusive. Applications to the Clerk of the Council, 10, New-street, Boston.

Births, Marriages, and Deaths.

BIRTHS.

ECCLES.—On Aug. 19th, at Netherpenns, Nafferton, E. Yorks, the wife of Charles H. Eccles, M.R.C.S., L.R.C.P., of a daughter.

LANDER.—On Aug. 21st, at Forest Side, Noel-street, Nottingham, the wife of Francis J. Lander, M.R.C.S., L.R.C.P. Lond., of a son.

MACKINNON.—On Aug. 19th, at Woodford House, Aldershot, the wife of Surgeon-Lieutenant-Colonel H. Mackinnon, D.S.O., A.M.S., of a daughter.

SANDERS.—On Aug. 22nd, at Camden-road, N.W., the wife of Horace Sanders, Surgeon, of a son.

SQUIRE.—On Aug. 24th, at Harley-street, W., the wife of J. Edward Squire, M.D., of a son.

SWINHOE.—On Aug. 26th, at the Close, New Swindon, the wife of George Rodway Swinhoe, of a daughter.

TAYLOR.—On Aug. 23rd, at St. Helens, Ayton, Berwickshire, the wife of D. R. Taylor, L.R.C.P. & S. Edin., of a daughter.

WILDEY.—On Aug. 26th, at the Hospital Barracks, R.M.L.I. Depôt, Walmer, the wife of Surgeon A. Gascoigne Wildey, R.N., of a daughter.

MARRIAGES.

BELL—PARSON.—On Aug. 21st, at St. Luke's Church, Halifax, N.S., George Warner Bell, Staff-Surgeon R.N., H.M.S. Magicienne, youngest son of the late Sir Sydney Smith Bell, Chief Justice of the Cape of Good Hope, to Rosa Maton Parson, fourth daughter of the late E. K. Parson, J.P., of Southsea and Emsworth.

CAMPBELL—GRIBBON.—On Aug. 1st, at St. Matthew's Church, Bayswater, by the Rev. T. A. Chapman, B.A., E. Kenneth Campbell, M.B., F.R.C.S., son of Hugh Campbell, of Wimpole-street, W., and late of Eweland Hall, Essex, to Rose Maude, daughter of the late Brigade-Surgeon G. C. Gribbon (K.O. Scottish Borderers), and grand-daughter of the late Sir Hugh Allan, of Montreal, Canada.

ELLIOTT—COX.—On Aug. 21st, at Trinity Church, South Hampstead, Gilbert Elliott, M.R.C.S., L.R.C.P., son of Mr. R. P. Elliott, of Canfield-gardens, N.W., to Ada Barton, eldest daughter of Frederick Cox, Vernon-place, Bloomsbury-square, W.C.

HELLIER—HARRISON.—On Aug. 22nd, at the Wesleyan Church, Rooden-lane, Manchester, by the Rev. Dr. Moulton, of Cambridge, John Benjamin Hellier, M.D., of Leeds, to Lily, younger daughter of the late Henry Bowers Harrison, J.P., of Prestwich.

HEYWARD—VANHOUSE.—On Aug. 20th, at St. Barnabas', Dulwich, S.E., Henry Heyward, L.R.C.S.I., L.R.C.P.I., to Eliza Anne, younger daughter of the late J. M. Vanhouse.

HILLYAR—ELLERY.—On Aug. 21st, at Plympton St. Mary's Church, Devon, Cecil B. Hillyar, L.R.C.S., L.R.C.P. Edin., of Wellington, Somerset, youngest son of the late Admiral Henry S. Hillyar, C.B., of Plympton, to Florence, younger daughter of Richard Ellery, M.R.C.S., L.S.A., of Plympton.

ROBINSON—O'CONOR.—On Aug. 22nd, in Dublin, Bernard Robinson, M.R.C.S. Eng., L.R.C.P. Lond., of Oakamoor, North Staff., son of the late Thomas Robinson, Surgeon, of Alton, Staff., to Mary, daughter of the late Roderic O'Conor, J.P., Dublin, and Milton, county Roscommon.

SHAW MACKENZIE—YULE.—On Aug. 24th, at St. James's, Paddington, by the Rev. E. A. Midwinter, John A. Shaw-Mackenzie, M.B. Lond., M.R.C.S., of 24, Savile-row, W., to Fanny, daughter of the late Robert Yule, of Gravesend.

DEATHS.

AMSDEN.—On Aug. 27th, at 103, Green-lanes, N., the residence of his son-in-law, W. C. Worley, George John Amsden, M.D., in his 81st year.

GLEESON.—On Aug. 27th, at his residence, Benown, county Westmeath, Edward M. Gleeson, M.R.C.S., L.S.A., in his 80th year.

IN MEMORIAM.

WAKLEY.—On Aug. 30th, 1886, at Heathlands-park, Longcross, Chertsey, Surrey, James Goodchild Wakley, M.D., for twenty-five years Editor of THE LANCET, youngest son of the late Thomas Wakley, M.P.

N.B.—A fee of 5s. is charged for the Insertion of Notices of Births, Marriages, and Deaths.

Notes, Short Comments, and Answers to Correspondents.

EDITORIAL NOTICE.

IT is most important that communications relating to the Editorial business of THE LANCET should be addressed *exclusively* "TO THE EDITORS," and not in any case to any gentleman who may be supposed to be connected with the Editorial staff. It is urgently necessary that attention be given to this notice.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

Lectures, original articles, and reports should be written on one side only of the paper.

Letters, whether intended for insertion or for private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe or recommend practitioners.

Local papers containing reports or news paragraphs should be marked and addressed "To the Sub-Editor."

Letters relating to the publication, sale, and advertising departments of THE LANCET *should be addressed "To the Manager."*

We cannot undertake to return MSS. not used.

MANAGER'S NOTICE.

"THE LANCET" AND ACCIDENT INSURANCE.

A LITHOGRAPHED CIRCULAR LETTER, emanating from an office in the Strand district, is being sent to members of the medical profession, offering to supply them with THE LANCET, in conjunction with an accident insurance policy. The Proprietors of THE LANCET are in no way connected with the scheme (of which they cannot approve), and were not aware of its inception until their attention was called to it by a reader who had received the circular.

"THERAPEUTIC" FOLK-LORE.

WE have received the following from a correspondent. Fruit, according to orthodox theology, was the source of all our woe. Now, apparently, the same food is the source of every blessing.

"*Lemon Cures.*—Cures chronic bronchitis, diseased lung, and brings back the voice after being lost, also coughs of the longest standing and nightmare. Directions:—Place a lemon whole as you have bought it on the oven top; keep now and again turning it over, in order to keep it from bursting. It becomes heated all round and turns into a strong acid by this process. Then have a cup and fork ready; touch it with the fork, and it will run whole into the cup; stab it well with the fork, drink off the hot juice neat as sharp as possible, go straight to bed, and you will be asleep directly. I was cured in two nights after being given up by the doctor, who said I should linger away the last stage of chronic bronchitis. In my case I had no pain, and was surprised about nine o'clock after breakfast to loose (*sic*) a great quantity of hard stuff in the nature and form of hard gristle, which for the moment quite stunned me, cut in the form of minute squares. I should say I lost a gill and a half. This is 12 years since.

"*Chronic Rheumatism.*—Have 4 woollen socks, a lemon, and a glass of whisky, which is all that is required. If in the higher part of the frame, the head and the shoulders, hold the lemon in the palm of your right hand, still admitting the lemon in the hand. Pull on the 4 woollen socks singly same as gloves till you get on the 4, which is eight. Take a glass of whisky, and the natural heat of the body will draw the disease into the salt lemon, discolouring it; if rheumatism, green—different diseases different colours.

"*Bleeding Piles*—Which I conscientiously feel without doubt in my own mind that this form is chronic. ½ lb. best figs placed in a small dish; pour a little water over them, then stew them in the oven. Drink the water in proportion as you eat a fig before breakfast fasting. This never fails."

G. R. P.—Apply to the Secretary, St. Andrews Ambulance Association, 103, West Regent-street, Glasgow. This is only a suggestion, for perhaps the same rule holds good as with the St. John's Association.

ADVERTISING IN THE LAY PRESS.

WE notice in the columns of a lay contemporary an announcement that "Sir Dyce Duckworth, the well-known physician, has gone to America. He intends to be back in this country about Sept 16th." We are too often compelled to reprove practitioners with advertising, or to call attention to their being advertised by injudicious or stupid friends, and we cannot ignore similar occurrences in the case of leaders of the profession, although we feel sure that the objectionable notice has been inserted without Sir Dyce Duckworth's knowledge or leave. The curse of publicity which necessarily attends upon those in any prominent position makes it, perhaps, more difficult for them than for humbler members to avoid this sort of thing, but owing to their position it is of all the more importance that they should take every means to prevent such notices getting into the public press.

To the Editors of THE LANCET.

SIRS,—One has been highly impressed by your just criticisms which have appeared from time to time in the medical journal *par excellence*, THE LANCET, on the occasion of "puffs" of medical practitioners by the lay press. On turning over the leaves a few days since of "Parke's Drug Stores, Limited" (21, Princes-street, Oxford-circus, W.), which has a very extensive circulation among its customers, I was a good deal surprised to read that pages 42 to 45 were devoted to a "Directory of some London Doctors," which comprise the names of many of our leading hospital physicians and surgeons, with their respective residences, as well as specialists of all diseases, from the throat to the anus. Surely, this is a most flagrant form of advertisement, and deserves your severe censure. It is to be regretted that the leaders of our profession should set their younger members such a reprehensible example, when so much has been written condemning medical advertising. It is, however, just possible that these gentlemen may not have sanctioned their names figuring so glaringly as they do in Parke's price list.

I am, Sirs, yours faithfully,

High-street, Putney, S.W., Aug. 21st, 1895. J. FRENCH BLAKE.

"FACING BOTH WAYS."—HOMŒOPATHY, IF PREFERRED!

THE following card deserves a wider circulation than its author designed for it.

"E. W. J. Ireland, Physician and Surgeon, 142, Elizabeth-street. Hours for Consultation: From 9 to 10.30 A.M., and from 2 to 3 and 6.30 to 7.45 P.M. Telephone No. 92.

"N. B.—Dr. Ireland will treat Homœopathically any of his patients preferring to be so treated."

Mr. Ireland is, we believe, an M.B., C.M. Edin., and practises in Hobart, Tasmania. His estimate of medical duty does not seem so high as we should have expected in the graduate of an ancient and famous University. If a patient is to choose his own treatment, where is the use of the medical man's scientific knowledge? If the medical man consents to be guided by the whims of the patient, where is his conscience and his dignity? Even the public will be apt to appraise lightly the judgment and the principles of a practitioner who to please a section of his patients adopts a practice which he does not pretend to adopt for its own sake.

Dr. C. E. FitzGerald.—The work of translation would probably be arduous, but there is no doubt that the book would receive much attention. It is profusely illustrated, and therefore the best plan would be, in the first instance, to approach some leading firm of publishers respecting its reproduction in this country.

Dr. F. A. Watkins.—The Meath Home for Epileptic Women and Children, Godalming, Surrey. This useful institution is sadly hampered by want of funds, and there are very few free beds. See THE LANCET, March 9th, 1895.

Mr. A. J. Morris.—Not if properly cooked, but improper cooking might happen also when a coal fire is used.

A Guardian, late Medical Officer's, letter shall receive attention in our next regular issue.

H. M. K.—Our correspondent must consult his own medical man.

"RAILWAY TRANSPORT FOR INVALIDS."

To the Editors of THE LANCET.

SIRS,—In reply to a letter signed "Railway" which appears in the current issue of THE LANCET, I beg to state that I was the successful competitor for "the best method." On your correspondent communicating with me I shall be pleased to give some particulars of the method. Also, if I might be allowed space in your columns, I should be glad to give full details of the method, which is as simple as it is absolutely effectual. I am, Sirs, yours obediently,

HAYDN BROWN, L.R.C.P. Edin.

12, St. Charles-square, North Kensington, W., Aug. 24th, 1896.

A STRANGE REQUEST.

THE questions addressed to us week by week are of a truly encyclopædic nature and the commissions we are asked to execute of a most varied and curious character. The following is perhaps worthy of record:—

"London LANCET.—Mr. Editor,—I ask you to place this letter in the hands of some man or company of men in your city of London who will sell me a wig for my mother, who is sixty-five years of age. The wig shall be full size with some gray hairs in it, so that it shall be appropriate for a person of her age. The wig shall be strictly first class and a good one. Send me prices and instruction for measurement."

The letter, which comes from America, is duly signed by "—— ——, M.D." We omit the name, as the letter is doubtless a hoax. Can it be that the writer is aware that from a hairdresser's window facing our office a gentleman whose wig is changed nearly every day has from time immemorial, as it were, fixed his glassy stare on our editorial room? If this information is of any assistance to our correspondent he is welcome to apply to the "Dummy" in question.

MESSRS. FRANCIS NEWBERY AND SONS, of 1, and 3, King Edward-street, E.C., write in reference to our articles on the British Medical Association Museum that their exhibit was made by them on behalf of Messrs. William R. Warner and Co., New York and Philadelphia.

Post Mortem.—We do not think that there is any definite rule; but probably most principals would allow the locum-tenent to take the fee.

Subscriber.—Our correspondent should communicate either with the clerk or chairman of the board of guardians.

"THE TITLE OF 'DR.'"

To the Editors of THE LANCET.

SIRS,—Your correspondent, Mr. J. B. Pike, looks only at the subject in a selfish way. If Mr. Pike, and those like unto himself who have so long cast a hungry look at the title of "Dr." and have ever been desirous of possessing the same, would but fulfil the necessary conditions requisite for possessing the same, then the feeling of "irritation" and "chronic desquamation with a tendency to itching" complained of would have its causation removed, and the only honest and legitimate treatment prescribed. No amount of sophistry can gainsay this—namely, that to be a doctor one must be a doctor of something, be it medicine, law or theology; without such no person is entitled to the term "Dr." Mr. Pike says the matter could be settled (1) by a consensus of qualifying bodies; (2) by friendly (*sic*) legal action; (3) by obtaining highest legal opinion. I reply that it could not, but only by passing the necessary training and examinations. To me it is incomprehensible how any medical man can wish to appropriate that which he is unentitled to. In medicine the title "Dr." exclusively and incontestably belongs to graduates possessing the degree of M.D., so that it certainly is not honourable for medical men not possessing that degree to style themselves or desire to appropriate, the title "Dr." As for being called and styled "Dr." by courtesy, the idea is absurd and ludicrous in the extreme. Fancy for courtesy's sake expecting and desiring what does not belong to one, thereby rendering the person artificial and more like a fool than an educated man. Again let me recommend those gentlemen who desire the title of "Dr." to take the M.D. or go without it.

I am, Sirs, yours truly,

Aug. 28th, 1895. M.B., C.M.

"*" We have received several other communications upon this subject, for which we cannot find room. One correspondent, who has failed to understand us (which has not stood in the way of a desire to criticise our recent leading article very severely) asks: "..... What is there more calculated to mislead and puzzle the general public than trying to explain to them what they never knew, and never will know, and never care to know .....?" We ask with him, What? Our article, however, was not addressed to the public, but, as is our invariable custom, to the profession, and all the letters to which we were to a certain extent replying, save one, were from medical men. This correspondence must now cease.—ED. L.

Consanguis.—THE LANCET, vol. ii. 1883, p. 88; THE LANCET, vol. ii. 1885, p. 680; Brit. Med. Jour., vol. i. 1887, p. 1145; "The Marriage of Near Kin," by A. H. Huth (Longmans, 1887).

W. E.—We never prescribe; our correspondent must consult his own medical man.

Mr. T. Caton, jun.—We know nothing whatever of the matter in question.

M.B., C.M.—Our correspondent has forgotten to enclose his name and address.

COMMUNICATIONS not noticed in our present number will receive attention in our next regular issue.

MIDWIFERY DIPLOMAS.

Truly Qualified.—The right of any registered practitioner to practise midwifery has never, as far as we know, been questioned. The essence of the Act of 1886 was in enacting that henceforth no person should be registered who was not qualified in the three branches of medicine, surgery, and midwifery—midwifery for the first time being placed, as a condition of registration, on a level with medicine and surgery. Even a midwife can recover her fee in a court. 2. The regulation in regard to a pupillage for six months in the fifth year is permissory only, not binding.

METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET Office, Aug. 29th, 1895.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb	Wet Bulb	Solar Radia in Vacuo.	Maximum Temp. Shade.	Min. Temp	Rainfall.	Remarks at 8.30 A.M.
Aug. 23	29·87	S.W.	66	63	125	77	61	0·37	Cloudy
" 24	29·95	W.	62	58	114	72	57	...	Cloudy
" 25	30·39	W.	62	55	112	70	50	...	Cloudy
" 26	30·08	S.W.	60	59	89	68	57	0·15	Raining
" 27	29·81	S.W.	62	60	110	73	59	0·03	Cloudy
" 28	30·14	S.W.	62	58	114	75	56	...	Bright
" 29	30·20	WNW	63	60	122	75	60	...	Bright

Medical Diary for the ensuing Week.

OPERATIONS.

METROPOLITAN HOSPITALS.

MONDAY.—London (2 P.M.), St. Bartholomew's (1.30 P.M.), St. Thomas's (3.30 P.M.), St. George's (1 P.M.), St. Mark's (2 P.M.), Chelsea (2 P.M.), Samaritan (Gynæcological, by Physicians, 2 P.M.), Soho-square (2 P.M.), Royal Orthopædic (2 P.M.), City Orthopædic (4 P.M.), Gt. Northern Central (Gynæcological, 2.30 P.M.).

TUESDAY.—London (2 P.M.), St. Bartholomew's (1.30 P.M.), Guy's (1.30 P.M.), St. Thomas's (3.30 P.M.), Westminster (2 P.M.), West London (2.30 P.M.), University College (2 P.M.), St. George's (1 P.M.), St. Mary's (1.30 P.M.), St. Mark's (2.30 P.M.), Cancer (2 P.M.).

WEDNESDAY.—St. Bartholomew's (1.30 P.M.), University College (2 P.M.), Royal Free (2 P.M.), Middlesex (1.30 P.M.), Charing-cross (3 P.M.), St. Thomas's (2 P.M.), London (2 P.M.), King's College (2 P.M.), National Orthopædic (10 A.M.), St. Peter's (2 P.M.), Samaritan (2.30 P.M.), Gt. Ormond-street (9.30 A.M.), Gt. Northern Central (2.30 P.M.).

THURSDAY.—St. Bartholomew's (1.30 P.M.), St. Thomas's (3.30 P.M.), University College (2 P.M.), Charing-cross (3 P.M.), St. George's (1 P.M.), London (2 P.M.), King's College (2 P.M.), Middlesex (2 P.M.), Soho-square (2 P.M.), North-West London (2 P.M.).

FRIDAY.—London (2 P.M.), St. Bartholomew's (1.30 P.M.), St. Thomas's (3.30 P.M.), Guy's (1.30 P.M.), Charing-cross (3 P.M.), St. George's (1 P.M.), King's College (2 P.M.), Cancer (2 P.M.), Chelsea (2 P.M.), Gt. Northern Central (2.30 P.M.).

SATURDAY.—Royal Free (9 A.M. and 2 P.M.), Middlesex (1.30 P.M.), St. Thomas's (2 P.M.), London (2 P.M.), University College (9.15 A.M.), Charing-cross (3 P.M.), St. George's (1 P.M.), Cancer (2 P.M.).

At the Royal Eye Hospital (2 P.M.), the Royal London Ophthalmic (10 A.M.), the Royal Westminster Ophthalmic (1.30 P.M.), and the Central London Ophthalmic Hospitals operations are performed daily.

During the week marked copies of the following newspapers have been received:—*Sheffield Independent, Bristol Times and Mirror, St. Helens Newspaper, Ayrshire Post, Morning Leader, Star, Newcastle Journal, Sheffield Telegraph, Northern Echo, Kent Mercury, Macclesfield Courier, Scotsman, Glasgow Herald, Rochdale Observer, Sanitary Record, Yorkshire Post, Local Government Journal, Local Government Chronicle, Auckland Weekly News, Elgin Courant, Bury Times, Adelaide Observer, Newcastle Chronicle, Hornsey Journal, Eastern Morning News, Wolverhampton Chronicle, Standard, Court Journal, Lincolnshire Chronicle, Daily News, Market Harborough Advertiser, Wiltshire Mirror, East London Observer, Southampton Times, Builder, Evesham Journal, Worcester Herald, Worcester Daily Times, Brighton Gazette, City Press, Hertfordshire Mercury, West Middlesex Standard, Mining Journal, Weekly Free Press and Aberdeen Herald, Levant Herald, West Middlesex Advertiser, Westminster Gazette, Grimsby News, Saturday Falkirk Herald, Bacup Times, Southport Visitor, Pullen's Kent Argus, Grantham Times, Banffshire Journal, Leicester Post, Agricultural Gazette, Times of India, Citizen, Grantham Journal, Pioneer Mail, &c., &c.*

Communications, Letters &c. have been received from—

A.—Mr. J. Alsop, Newton Abbott; Aston Union, Clerk of.

B.—Dr. J. Barr, Liverpool; Dr. J. B. Bradbury, Cambridge; Dr. J. J. Bailey, Lond.; Dr. A. J. Bentley, Lond.; Mr. F. St. J. Bullen, Bristol; Mr. R. Bowes, Darlington; Mr. Jno. F. Bill, Lond.; Mr. L. A. Bidwell, Lond.; Mr. W. Bernard, Chamounix; Messrs. Burroughs, Wellcome, and Co., Lond.; Messrs Black and Co., Lond.; Messrs. Burgoyne, Burbidges, and Co., Lond.; Messrs. Blondeau et Cie., Lond.; *Birmingham Daily Post*, Proprietor of.

C.—Dr. W. H. Climo, Army Medical Staff; Dr. E. K. Campbell, Lond.; Mr. T. Caton, jun., Blundellsands; Messrs. T. Christy and Co., Lond.; Clerical and Medical Bank, Bristol, Secretary of; Cortland Wagon Co., Lond.; *Clinical Sketches*, Lond., Manager of; Capsicum, Lond.

D.—Mr. L. S. Dudgeon, Wishaw, N.B.; Mr. M. J. Doidge, Haverhill; Madam E. De Fontanier, Lond.; Derbyshire Royal Infirmary, Derby, Secretary of.

E.—Mr. A. R. Edwards, Brampton Brian; Edinburgh School of Medicine, Secretary of; E. M. V., Portsmouth.

F.—Dr. C. E. Fitzgerald, Folkestone; Messrs. Fannin and Co., Dublin.

G.—Mr. A. B. Griffiths, Brixton; Mr. A. G. Gravatt, Lond.; Messrs. E. Gallais and Co., Lond.; Great Yarmouth Hospital, Secretary of.

H.—Dr. F. W. B. Hutchison, Glam.; Dr. H. Hollis, Northampton; Mr. J. Heywood, Manchester; Mr. E. Huxley, Lond.; Mr. F. A. Z. Hammond, Cornwall; Messrs. Henderson and Son, St. Andrew's; Messrs. Hertz and Collingwood, Lond.; Messrs. W. Hay, Ltd., Hull; Home for Epileptics, Maghull, Secretary of; Horace, York.

J.—*Journal of Commerce*, Liverpool.

K.—Dr. P. J. A. Kelly, Yorkshire; Mr. H. M. Kennedy, Cumberland; Messrs. H. S. King and Co., Lond.; Messrs. Kerin and Lynam, Staines.

L.—Dr. J. F. Little, Lond.; Mr. G. E. Lewis, Lond; Messrs. E. and S. Livingstone, Edinburgh; Liquor Carnis Co., Bucks; Locum, Old Hill.

M.—Dr. H. W. G. Mackenzie, Lond.; Dr. J. D. Mann, Manchester; Mr. H. C. MacBryan, Box; Mr. W. J. Marsh, Bradford; Messrs. Macmillan and Co., Lond.

N.—National Dental Hospital and College, Lond., Dean of; North Cambs. Hospital, Wisbech, Hon. Secretary of; Nucleus, Lond.

O.—Dr. E. B. Owen, Lond.; Mr. J. Odling, Lond.; Messrs. Oliver and Boyd, Edinburgh.

P.—Dr. F. Page, Newcastle-on-Tyne; Dr. A. Percival, Newcastle; Mr. G. R. Penrose, Westmoreland; Mr. R. W. Pollard, Lond; Mr. E. J. Pryse, Keighley; Messrs. Pocock Bros., Lond.

R.—Dr. A. Robinson, Lond.; Mr. W. Reeve, Glasgow; Mr. J. Roberts, Lond.; Messrs. Robinson and Sons, Annan; Messrs. Ridges and Sons, Wolverhampton; Royal United Hospital, Bath, Superintendent of; Royal Portsmouth Hospital;

S.—Dr. R. Steele, Herts; Dr. R. C. Shettle, Reading; Dr. J. Stewart, Batley; Dr. G. Sturrock, Aberdeen; Mr. C. S. Stevens, Lond.; Mr. D. Stead, Shrewsbury; Mr. R. Steiner, Munich; Mr. J. J. Shaw, Scarborough; Mr. E. R. Schofield, Wisbech; Mr. D. Somerville, Colinton, N.B.; Messrs. G. and G. Stern, Lond.; Messrs. Shield and Kyd, Dundee; Messrs. J. P. Segg and Co., Lond.; Messrs. Swan, Sonnenschein, and Co., Lond.; Messrs. G. Street and Co., Lond.; Sanitas Co., Lond., Manager of.

T.—Mr. T. J. Talbot, Leeds; Mr. T. C. Town, Halifax.

U.—Urgent, Lond.

W.—Dr. William Williams, Cardiff, Mr. J. J. Weaver, Southport; Mr. C. H. Woolf, Lond.; Mr. A. Wilson, Lond.; Miss Webb, Eastbourne; Miss C. Willcock, Bideford; Messrs. W. Wood and Co., New York.

X.—X., Lond.

Z.—Z., Lond.

Letters, each with enclosure, are also acknowledged from—

A.—Dr. E. Allen, Hawes; Dr. A. E. Ash, Kempsey; Mrs. C. R. B. Alexander, Edinburgh; Austral, Lond.; Alpha, Lond.; Assistant, Lond.; A. P. K., Birmingham.

B.—Mr. W. Bowes, Hythe; Mr. W. H. Boger, Towey; Mr. T. W. Backhouse, Sunderland; Mr. T. B. Browne, Lond.; Mr. H. K. Bean, Wallsend, N.S.W.; Mr. A. Bensusan, Ostend; Messrs. J. Blinko and Son, Ramsgate; Banks, Lond.; Barth'sche Buchhandlung, Aachen.

C.—Mr. H. K. Costello, Ferblane, Ireland; Mr. T. Champness, Rochdale; Mr. Crickett, Talgarth; Miss F. Cox, Buxton; Messrs. A. Cohen and Co., Lond.; Capital, Lond.; Dr. C., Bromley; Cumberland, Liverpool; Carnivor, Lond.

D.—Mr. W. T. Davies, Nantgaredig; Mr. H. A. Drew, Didcot; Dublin Children's Hospital, Secretary of; Drugs, Lond.

E.—Mr. C. H. Eccles, Nafferton; E. T. M., Lond.

F.—Sir J. Fayrer, Lond.; Dr. J. Findlay, Penpont; F., Peterefield; F. G., Lond.; F. C., Pontnewydd.

G.—Dr. A. V. Geoghegan, Paris; Dr. J. F. Gillett, Andover; Mr. T. H. Gillam, Bromyard; Mr. A. B. Griffiths, Lond.; Globe Advertising Co., Lond.

H.—Dr. J. B. Hellier, Leeds; Dr. W. S. Hedley, Brighton; Mr. A. Hillaby, Pontefract; Mr. W. A. Hardiker, Brymbo; Mr. J. Heywood, Manchester; Hydrogen, Lond.; Horace, York.

J.—Dr. R. W. Jones, Penrhiwceibr; Dr. S. Johnson, Stoke-on-Trent; Julius, Lond.; J. D. G., Lond.; J. H., Lond.

L.—Mr. Laker, Dover; Mr. F. B. Leeder, Leamington; Mr. F. J. Lauder, Nottingham; Mr. H. C. Lawrence, Aysgarth; Messrs. Leader and Sons, Sheffield; Lancaster Infirmary, Secretary of; Lancashire, Lond.; Leucocyte, Lond.; L. G., Lond.

M.—Dr. A. B. McKee, Burnley; Dr. A. Mackay, Crook; Mr. S. B. Mason, Pontypool; Miss Mainwaring, Hastings; Midlands, Leeds; Medicus, Bayswater; Medicus, Lond.

O.—Opisthotonos, Lond.

P.—Dr. C. Pollard, Worcester; Mr. E. W. Paul, Cowes; Principal, West Worthing; Physician, Lond.; Perry, St. Leonard's-on-Sea.

R.—Mr. Ruppli, Lond.; Mr. H. A. Roechling, Leicester; Rev. C. E. Roberts, Bedford; Mr. B. Robinson, Oakamoor; Rusticus, Lond.

S.—Dr. J. B. Stewart, Dennistown; Dr. W. B. Stokes, Ton Pentre; Mr. H. M. Speechly, Parkgate; Mr. P. C. Smith, Hayes, Middlesex; Messrs. Stralendorff and Renshaw, Manchester; S. T. Tyre Co., Lond., Secretary of; Sharon Chemical Co., Little Chester; Scolpolax Lond.; Seti, Lond.; Spes, Lond.

T.—Mr. G. F. Thomas, Newhaven; Mr. D. R. Taylor, Ayton; Mr. J. W. Turnpenny, Lond.; Mr. Thin, Edinburgh; Mr. D. R. Tata, Dadar, Bombay; Tempus, Lond.

U.—University of Durham College of Medicine, Newcastle-on-Tyne, Secretary of.

V.—Violet, Lond.

W.—Dr. T. N. Wilson, Ibstock; Mr. F. A. Wagstaff, Saffron Walden; Mr. T. H. Wroger, Radstock; Mr. T. F. Wyse, Cloyne, co. Cork; Miss Webb, Beccles; Messrs. Wilcox and Co., Lond.; Messrs. G. Waterston and Sons, Edinburgh; Messrs. Wing and Broughton, Lond.

X.—X. Y., Lond.

SUBSCRIPTION.

POST FREE TO ANY PART OF THE UNITED KINGDOM.

One Year	£1 12 8
Six Months	0 16 3
Three Months	0 8 2

POST FREE TO THE CONTINENT, COLONIES, UNITED STATES, INDIA, CHINA, AND ALL PLACES ABROAD.

One Year	£1 14 8
Six Months	0 17 4
Three Months	0 8 8

Subscriptions (which may commence at any time) are payable in advance.

Cheques and Post Office Orders (crossed "London and Westminster Bank, Westminster Branch") should be made payable to Mr. CHARLES GOOD, Manager, THE LANCET Office, 423, Strand, London.

ADVERTISING.

Books and Publications ...	Seven Lines and under	£0	5	0
Officia and General Announcements	Ditto	0	5	0
Trade and Miscellaneous Advertisements	Ditto	0	4	6
	Every additional Line	0	0	6
First Page (under Contents) when space available				
(Books only)	Five Lines and under	0	5	0
	Every additional Line	0	1	0
Quarter Page		1	10	0
Half a Page		2	15	0
An Entire Page		5	5	0

Terms for Position Pages and Serial Insertions on application.

NOTICE.—Advertisers are requested to observe that it is contrary to the Postal Regulations to receive at Post Offices letters addressed to fictitious names or initials only.

An original and novel feature of "THE LANCET General Advertiser" is a special Index to Advertisements on pages 2 and 4, which not only affords a ready means of finding any notice, but is in itself an *additional* advertisement.

Advertisements (to ensure insertion the same week) should be delivered at the Office not later than Wednesday, accompanied by a remittance

Answers are now received at this Office, by special arrangement, to Advertisements appearing in THE LANCET.

The Manager cannot hold himself responsible for the return of testimonials &c. sent to the Office in reply to advertisements; copies only should be forwarded.

Terms for Serial Insertions may be obtained of the Manager, to whom all letters relating to Advertisements or Subscriptions should be addressed.

THE LANCET can be obtained at all Messrs. W. H. Smith and Son's and other Railway Bookstalls throughout the United Kingdom Advertisements are also received by them and all other Advertising Agents.

Agent for the Advertisement Department in France—J. ASTIER, 8, Rue Traversière, Asnières, Paris.